This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

Digitized by Google

M-T

Rebound 1942

HARVARD UNIVERSITY

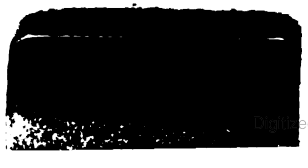
VE RI TAS

LIBRARY

OF THE

MUSEUM OF COMPARATIVE ZOÖLOGY

8638



Digitized by Google

Digitized by Google

Digitized by Google

8638
Feb. 1684

CON

S

WITH

Digitized by Google

ADVERTISEMENT.

I propose to compile a Conchological Manual, which, whilst more comprehensive than any similar work hitherto published, shall be so condensed in text and illustration that it may be issued at a much more moderate price. It will include, in systematic order, the diagnoses of all the genera and higher divisions of the mollusca, both recent and fossil, and the descriptions and figures of all the recent species; together with the main features of their anatomy and physiology, their embryology and development, their relations to man and other animals, and their geological and geographical distribution.

The material at my disposal for the purpose of working up this comprehensive plan is ample and unexcelled:

I.—The Library of the Academy of Natural Sciences of Philadelphia contains almost every separate work ever published upon the subject, together with the various volumes of voyages and travels, of general natural history, and especially scientific periodicals, and the published transactions of learned societies throughout the world. For Conchological purposes this library is almost complete, and it is very rarely that its shelves do not afford any reference desired.

II.—The Conchological Museum of the same institution ranks among the largest in the world in the number of species represented, whilst in the richness of its geographical suites, the number of specimens illustrating varietal forms, etc., it is probably the finest collection extant.

It is intended to arrange and describe the valid species in accordance with their inter relationships, and it is hoped that by so doing their number may be greatly reduced. Every genus and every recent species will be fully illustrated, so far as specimens or hitherto published figures will enable me to do so. The experienced skill of the artists who have undertaken to furnish the illustrations (of which 30,000 to 40,000 will be required), will sufficiently guarantee the accuracy of this department of the Manual.

In the preparation of the text every care will be taken to discover and correct, and to avoid, error; but it may be reasonably apprehended that the performance of such an immense work must be in many respects inferior to

Digitized by Google

MANUAL

OF

CONCHOLOGY;

STRUCTURAL AND SYSTEMATIC.

WITH ILLUSTRATIONS OF THE SPECIES.

BY GEORGE W. TRYON, JR.

CONSERVATOR OF THE CONCHOLOGICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

VOL. VI.

CONIDÆ, PLEUROTOMIDÆ.

PHILADELPHIA:

Published by the Author,

ACADEMY OF NATURAL SCIENCES, COR. 19TH & RACE STS.

1884.

Digitized by Google

Wm. P. Kildare, Printer, 734 & 736 Sansom St., Phila.

Digitized by Google

Conidae written by
George Parker

MANUAL OF CONCHOLOGY

Family *CONIDÆ*.

Teeth subulate, in two series, on a tubular prolongation of the retractile proboscis, and with a bundle of sharp subulate teeth at the extremity; head with a produced tubular veil; tentacles subulate; eyes on bulgings of the outer side of the tentacles; mantle enclosed, with an elongated siphon in front; foot simple, long and narrow, with a conspicuous aquiferous pore on the middle of the anterior part of the sole.

Operculum unguiform, with apical nucleus.

Shell inversely conical, with narrow aperture the length of the body-whorl, the lip sharp, usually excavated at the hind-part, where it joins the suture; epidermis thin and smooth or longitudinally or spirally ridged, sometimes tufted.

The great family of Cones, well-characterized by peculiarities both of dentition and shell, are principally inhabitants of equatorial seas. Haunting the holes and fissures of rocks, and the labyrinths of coral-reefs, they lead a predatory life, boring into the shells of other mollusks, and sucking the juices from their bodies.

Until recently the classification of Conidæ given by Messrs. H. and A. Adams in their Genera of Recent Mollusca has been generally adopted. This classification is given in Structural and Systematic Conchology, ii, p. 187, and need not be reproduced here. The genera and subgenera are extremely artificial and insufficient for the purpose of arranging a large collection, inasmuch as many of the systematic characters fail to discriminate groups when extensive series are compared. Dr. Weinkauff has recently (Jahrb. Deutsch. Mal. Gesell., i, 1874) arranged the Cones into sections, each named for a characteristic species,

Digitized by Google

around which is grouped other similar species. In this arrangement, pattern of coloring takes high rank, and the groupings indicate species which may have had a common ancestry. That this classification is in many respects faulty cannot be denied, but it appears on the whole to be better than that of the Messrs. Adams.

A number of beautifully illustrated monographs of Conus have been published:—

Sowerby. Conchological Illustrations. 137 colored figures.
Sowerby. Thesaurus Conchyliorum (and Supplement), vol. iii. 450 species; the plates containing about 650 figures.
Reeve. Conchologica Iconica (and Supplement). 337 species.
Kiener. Coquilles Vivantes. 324 species, 111 plates.
Weinkauff. In Küster's Continuation of Martini and Chemnitz's Conchylien Cabinet (completed 1875). 411 species, 71 colored plates.

Weinkauff's Catalogue of Conus, published in 1874, contains the names of 352 species, distributed into 17 groups or sections:—

1. Marmorei (*C. marmoreus*, Linn.). 2. Literati (*C. literatus*, Linn.). 3. Figulini (*C. figulinus*, Linn.). 4. Arenati (*C. arenatus*, Hwass). 5. Mures (*C. mus*, Hwass). 6. Varii (*C. varius*, Linn.). 7. Ammirales (*C. ammiralis*, Linn.). 8. Capitanei (*C. capitaneus*, Linn.). 9. Virgines (*C. virgo*, Linn.). 10. Dauci (*C. daucus*, Hwass). 11. Magi (*C. magus*, Linn.). 12. Achatini (*C. achatinus*, Chemn.). 13. Asperi (*C. asper*, Lam.). 14. Terebri (*C. terebra*, Born). 15. Bulbi (*C. bulbus*, Reeve). 16. Tulipæ (*C. tulipa*, Linn.). 17. Texti (*C. textile*, Linn.).

The Cones are very variable in some of their characters, such as the tuberculation of the spire and body-whorl, striæ, colors and the pattern of coloring; so that the synonymy is very difficult to arrange satisfactorily. A number of species have been characterized since the date of the last-named publication, but on the other hand several species considered distinct by Dr. Weinkauff I have been obliged to consolidate, so that in the following pages, arranged mainly in accordance with his catalogue, the number of admitted species will not be found to vary materially from his enumeration.

Digitized by Google

The family, as herein restricted, includes the single genus Conus. There are no extinct genera.

GOSAVIA, Stoliczka, described as a member of the family, I have described and figured as a subgenus of Voluta (Man., iv, 78).

CONORBIS, Swainson, which may be subgenerically distinct, is described and figured in Struct. and Syst. Conch., ii, 188, t. 58, f. 50. It is an eocene group.

About 100 fossil species of Conus have been described; they are extensively distributed, and first appear in cretaceous strata.

Dr. Weinkauff has added to his Systematic Catalogue of Conus, extensive tables of geographical distribution—in which the species found in each province are separately enumerated and named. The distribution may be summarized as follows:—

1. European Province, 1 sp. 2. West African, 27 sp. 3. East American Province, 32 sp. 4. So. African, 22 sp. 5. West American (North, Central and South), 30 sp. 6. East African (including Madagascar and Red Sea), 81 sp. 7. South Asiatic, 76 sp. 8. East Asiatic (including Philippines and Sandwich Is.), 133 sp. 9. Australian, 113 sp.

There are, of course, many duplications in these numbers; the distribution of many single forms throughout the sixth to ninth provinces, as above defined, indicates that for Conus (and for many other carnivorous gastropods) these divisions have no real existence.

Mr. Arthur Adams, in his delightful natural history notes, in the Narrative of the Voyage of the Samarang, writes:—

"The animal of *Conus aulicus* has the proboscis beautifully varied with red and white, and there is a square and very minute operculum on the dorsal surface of the hinder part of the foot. Its bite produces a venomed wound, accompanied by acute pain, and making a small, deep, triangular mark, which is succeeded by a watery vesicle. At the little island of Meyo, one of the Moluccas, near Ternate, Sir Edward Belcher was bitten by one of these Cones, which suddenly exserted its proboscis as he took it out of the water with his hand, and he compared the sensation he experienced to that produced by the burning of phosphorus under the skin. The instrument which inflicted the wound, in this instance, I conceive, must have been the tongue,

Digitized by Google

which in these mollusks is long, and armed with two ranges of sharp-pointed teeth.

"The Cones become more numerous and varied in their colors, as we approach the equatorial seas, and they form bright and beautiful ornaments to the shores of tropical islands. They seem to prefer obscure holes in the rocks, where they lead a predatory life, boring into the substance of the shells of other mollusks, for the purpose of sucking the juice from their bodies. They crawl but slowly, and usually with their tentacles extended in a straight line before them. They are very timid, and shrink within their shells quickly on the approach of danger. Some affect deep water, and one was dredged by us in the Sunda Straits, in thirty fathoms; and another, the *Conus Thalassiarchus*, at Sooloo, in about forty fathoms."

"The proboscis in its retracted state, as seen in the animal preserved in spirits, is short, broad, conical, annulate, prominent, in the base of the tubular veil, with a roundish, central mouth. Instead of having any elongated lingual band covered with short transparent teeth, like the rest of the Proboscidifera and Rostrifera, it has a fleshy tube with a bundle of subulate barbed teeth directed towards the mouth; this tube is prolonged behind and below at right-angles with its upper part and mouth into an elongated, fleshy, attenuated subulate tube, containing with its hinder edge two series of similar subulate red barbed teeth, directed from the aperture towards the apex of the tube. (A single tooth, greatly magnified, of *C. Hebræus*, Linn., is represented in Structural and Systematic Conchology, t. 10, f. 5.)

"The teeth are implanted by a distinct root into the substance of the tube; those near the upper or oral part of the tube are placed rather irregularly in two parallel rows, but those nearer the tip are more crowded, and the lines gradually diverge from each other.

"I shall not attempt to describe the manner in which these teeth are brought into action, as I have only seen them in the preserved specimen; but those nearest the mouth are probably used to pierce the animal, which is held fast by the contraction of the veil, as described by Adanson. The organization and structure of the mouth is so unlike that of the other Proboscidifera and Rostrifera, where the teeth are placed on a lingual

Digitized by Google

band and used to rasp the food, being replaced by others as soon as those in action are injured by use, that I am inclined to form the Cones into a third suborder, which may be called Toxifera; and it is probable that the Pleurotomidæ, which are described by Lovén as having similar subulate teeth in two series, should be placed in the same suborder, as they appear to differ from the Cones chiefly in the veil being truncated and not produced round the base of the proboscis."—Dr. J. E. GRAY, Ann. and Mag. N. H., xii, 1853, p. 177.

An operculum normally exists in all the groups of Conus (probably in all the species), but it is so very small relative to the size of the shell as to have generally escaped observation, and is very seldom preserved in collections. It is corneous, narrowly elongated, with apical nucleus, and the impression of the muscular attachment varies from one-half to two-thirds of the inner surface. The opercula of a number of species of Cones are figured and described by Crosse and Marie, in Journal de Conchyl., 1874.

Operculum of *C. textile*, Linn. (Pl. 29, figs. 92, 93).

Sections of the shell of Conus, showing the structure and plan of growth, are figured in Structural and Systematic Conchology, i, Pl. 1, figs. 6, 7, 8. The anatomy of *Conus tulipa*, Linn., is illustrated and described in the same work, i, Pl. 15, fig. 80.

Genus CONUS, Linn.

Shell thick, obconic, whorls enrolled upon themselves, the spire short, smooth or tuberculated; aperture elongated, narrow, the margins parallel, truncated at the base; the outer lip with a slight sutural sinus.

Section I. MARMOREI.

Conus (typical) of Mörch and H. and A. Adams. *Coronaxis*, Swainson. *Rhombus*, Montfort.

C. MARMOREUS, Linn. Pl. 1, figs. 1–5.

White or light pink-white, with chocolate or chestnut reticulations, so arranged as to expose the white in rounded triangular large spots; aperture white or light pink. Length, 4–5 inches.

Indian Ocean, Japan, Australia, Polynesia, etc.

The barbed teeth of this species inflict severe wounds.

Digitized by Google

Var. BANDANUS, Hwass. Pl. 1, fig. 2.

The triangular white markings are more crowded than in the typical form; the colored markings form two irregular bands.

Philippines, *New Caledonia*, *Banda*, etc.

Var. CROSSEANUS, Bernardi. Pl. 1, fig. 3.

The chocolate reticulations heavier and closer.

New Caledonia.

Var. NIGRESCENS, Sowb. Pl. 1, fig. 4.

Surface nearly entirely covered by the chocolate markings. Intermediate states of coloring are quite common, so that the division into varieties is arbitrary.

Var. PSEUDOMARMOREUS, Desh. Pl. 1, fig. 5.

Shell regularly grooved throughout, spire rather more elevated, not tuberculated, last whorl somewhat convex on the sides.

Length, 2 inches.

Habitat unknown.

Described from a single specimen, and at most only a variety of *C. marmoreus.*

C. NOCTURNUS, Hwass. Pl. 1, figs. 6, 7.

Pattern of markings essentially the same as in *C. marmoreus*, but the chocolate-color coalesces into two broad irregular bands within which the triangular white spots appear only occasionally.

Length, 2–3 inches.

Ceylon, *Java*, *Mauritius*, *Moluccas*, *Viti Isles*, etc.

In *C. Deburghiæ*, Sowb. (fig. 7), the surface is sometimes granular in revolving lines, and the nodules are compressed.

C. ARANEOSUS, Hwass. Pl. 1, figs. 8–10.

Shell very closely reticulated with white and light chestnut, the white spots crowded and irregular in size, the chestnut lines forming two interrupted, irregular bands.

Length, 2 5–4 inches. *Ceylon*, *Philippines*, *Moluccas.*

Dr. Weinkauff has adopted the name *C. peplum*, Chemnitz, for this species, but that author only happened to be binomial in this instance, many of his other Cones being designated by a descriptive phrase; I therefore prefer to retain the better known, if later name given by Hwass. This species is in part the *C. arachnoideus* of Gmelin.

Digitized by Google

Var. NICOBARICUS, Hwass. Pl. 1, fig. 9.

Reticulating lines chocolate-color, the two bands usually better defined.

Ceylon, *Nicobar Isles.*

Var. VIDUA, Reeve. Pl. 1, fig. 10.

Very like variety *Nicobaricus*, the bands not so well outlined usually, and having scattered triangular white spots upon them.

Philippines.

In this species, as in *C. marmoreus*, the varieties are entirely arbitrary.

C. IMPERIALIS, Linn. Pl. 1, figs. 11–13.

Shell yellowish white, with numerous interrupted revolving lines and spots of dark brown and two irregular light brown bands. Length, 2–3 inches.

Ceylon, *Java* to *New Caledonia* and *Viti Isles.*

Var. FUSCATUS, Lam. Pl. 1, fig. 13.

The light brown coloring extends in clouds and irregular markings over the surface, so that the bands can scarcely be defined.

Zanzibar, *Mozambique*, *Philippines*, etc.

Var. VIRIDULUS, Lam.

The coloring is olive-brown, irregularly but somewhat longitudinally disposed, with more or less indication of two bands.

Zanzibar.

C. RECLUZIANUS, Bernardi. Pl. 1, fig. 14.

Yellowish white, with irregular broad yellowish brown bands and spots. Length, 58 mill.

Yellow Sea.

Only a single specimen occurred, which is possibly faded in coloring.

C. ZONATUS, Hwass. Pl. 1, fig. 15.

Purple ash, with narrow chestnut revolving lines and white spots, the latter frequently irregularly coalescing.

Length, 2–3 inches. *Ceylon*, *Nicobar Isles.*

C. MARCHIONATUS, Hinds. Pl. 2, fig. 16; Pl. 27, fig. 3.

Yellowish or light brown, with large white rounded triangular spots. Length, 1–1·5 inches. *Marquesas Islands.*

Digitized by Google

Pattern of coloring very like *C. marmoreus*, but lighter; the shell is immediately distinguished by the want of the coronal of tubercles and its usually small size. Mr. Melville, of Prestwich, near Manchester, England, who possesses a remarkable collection of Cones, has sent me a colored drawing of a gigantic specimen in his collection, 2·25 inches in length; he proposes to call it var. *eudoxus* (Pl. 27, fig. 3).

Section II. LITERATI.

Lithoconus (ex parte), Mörch.

C. LITERATUS, Linn. Pl. 2, figs. 17–19.

Shell white, with usually two or three broad light yellow or orange-brown bands, marked with revolving series of large and small dark chocolate or nearly black, round, square or triangular spots; these spots are frequently elongated longitudinally, and sometimes partially coalesce so as to form interrupted longitudinal stripes; base of shell often tinged with chocolate.

Length, 3–5·5 inches.

Zanzibar, *Ceylon*, *Java*, *Singapore*, *New Caledonia*, *Viti Is.*

C. Gruneri, Reeve (fig. 18), from the island of Java, appears to be a young shell without any distinguishable characters.

Var. MILLEPUNCTATUS, Lam. Pl. 2, fig. 19.

Said to differ from *C. literatus* in the spots being smaller and much more numerous, and in the absence of the yellow bands. It is connected by intermediate stages with the typical *literatus*.

C. CŒLATUS, A. Adams. Pl. 2, fig. 20.

Shell small, with revolving grooves, which are longitudinally striate; spire minutely coronate, the apex acutely elevated; white, widely reticulated with orange. Length, 16 mill.

China.

I am not acquainted with this species.

C. PLANAXIS, Deshayes. Pl. 2, fig. 21.

Yellowish, encircled by narrow, more or less interrupted chestnut lines, chocolate-tinged at the base. Length, 19 mill.

Isle of Bourbon.

An unsatisfactory species, being evidently described from a very young shell.

Digitized by Google

C. MUSICUS, Hwass. Pl. 2, figs 22, 23.

Whitish, with light ash-violet broad bands and narrow revolving lines of chocolate, broken up into short lines and spots; spire often slightly coronate, rayed with chocolate.

Length, 15–25 mill.

Philippines, *Australia*, *Solomon's Is.*, *New Caledonia*.

C. Mighelsi, Kiener (fig. 23), is a synonym.

C. EBURNEUS, Hwass. Pl. 2, figs. 24, 25.

Shell white, usually with two or three light yellowish bands, marked with very dark chocolate revolving spots.

Length, 2 inches.

Ceylon to *Viti Islands*.

Much smaller and more swollen in outline than *C. literatus*, lower part of the body-whorl distinctly grooved, spire with two impressed revolving lines, spots smaller than in *C. literatus*. *C. polyglotta*, A. Ad. (fig. 25), varies slightly in the disposition of the coloring.

C. TESSELLATUS, Born. Plate 2, figs. 26, 27.

Shell white, with reddish orange spots and short lines in revolving series, and forming by crowding together two irregular bands; base stained with light violet. Length, 2–2·5 inches.

Red Sea, *Ceylon*, *Mozambique*, *Mauritius*, *Philippines*, *New Caledonia*, *Polynesia*.

Has the same revolving sculpture at base and on the spire as *C. eburneus;* the difference is in coloring only.

C. crassus, Sowb. (fig. 27), is shorter and more ventricose, but can scarcely claim varietal rank. *Viti Islands*.

C. BAYLEI, Jousseaume. Pl. 2, fig. 28.

White, with light brown spots disposed in revolving series and indistinctly forming bands; base of shell and spire without revolving grooves. Length, 32 mill.

Habitat unknown.

Distinguished from *C. tessellatus* by the smooth surface.

C. SUTURATUS, Reeve. Pl. 2, figs. 29, 29*a*.

Shell yellowish or pink-white, with broad light brown bands; spire and base sulcate. Length, 28 mill.

North Australia.

Digitized by Google

Reeve's original description and figure were made from a dead, faded and depauperate shell (fig. 29).

C. PROTEUS, Hwass. Pl. 2, figs. 30–35; Pl. 3, fig. 36.

Shell white, with revolving series of spots and irregular or cloud-like markings of orange, chestnut or chocolate, often forming interrupted bands; base grooved, spire with a single broad sulcus. Length, 1·5–2·5 inches.

West Indies, Florida.

Dr. Weinkauff has distinguished *C. leoninus*, Chemn., not Hwass, said to come from the East Indies, but it does not appear to me to be different; *C. leoninus* of Hwass (fig. 31) is certainly the same. *C. spurius*, Gmelin, of authors (fig. 32) may also be placed here confidently, but the original description must remain a doubtful identification. *C. ochraceus*, Lam. (fig. 33), if correctly identified by Reeve and Sowerby, and *C. breviculus*, Sowb., are also synonyms; and *C. armillatus*, C. B. Ad., is a young shell.

Var. BICOLOR, Sowb. Pl. 2, fig. 34.

Shell shorter and wider at the spire than the usual form.

West Africa.

Var. PAPILIONACEUS, Hwass. Pl. 2, fig. 35.

Spire generally more depressed than in the typical form, the revolving rows of spots of smaller size, closer and more numerous. Length, 2–2·5 inches.

Senegal; Canaries; St. Thomas, West Indies (Swift).

Merges into the type by insensible gradations.

Var. SIAMENSIS, Hwass. Pl. 3, fig. 36.

Distinguished from var. *papilionaceus* by having more numerous narrow articulated fillets. The locality indicated by the name is exceedingly doubtful.

C. FLAMMEUS, Lam. Pl. 3, fig. 37.

Yellowish white, flamed and spotted with chestnut, the flames usually longitudinally disposed, forming revolving bands, the spots in revolving series. Length, 2–2·75 inches.

West Coast of Africa; Honduras (Dyson).

This is the *C. Lorenzianus* of Chemnitz, and very probably only a variety of *C. Proteus*, Hwass.

Digitized by Google

C. CHARACTERISTICUS (Chemn.), Auct. Pl. 3, figs. 38, 39.

White, irregularly longitudinally flamed, forming two (or sometimes three) interrupted broad bands; body-whorl somewhat inflated, rounded at the upper part, striate below; spire striate. Length, 2 inches.

West Africa, *West Indies* (authors); *Borneo.*

The West Indies are not confirmed as locality by any of the local collectors. "Borneo" is upon the label of specimens before me, purchased from a London dealer. Deshayes, in the second edition of Lamarck, admits the identity with this of Lamarck's *C. quæstor* and *C. muscosus*, the latter being not adult. *C. Paulinæ*, Kiener, is also a synonym, according to Dr. Weinkauff, and from the description of the unfigured *C. Masoni*, Nevill (Indian Ocean), I am inclined to place it here also.

C. SUCCINCTUS, A. Ad. Pl. 3, fig. 40.

Light rose-colored, with two revolving lines of chestnut dots. Length, 27 mill.

Natal, South Africa.

C. AMBIGUUS, Reeve. Pl. 3, figs. 41, 42.

Whitish, with obscure, light brown bands, and longitudinal streaks; spire ornamented with arched brownish spots. Length, 1·5 inches.

West Africa.

Reeve says: "There is always a doubtful character about shells exhibiting faint indications of color; I have not, however, succeeded in referring this to any species hitherto described." *C. griseus*, Kiener (fig. 42), is a synonym.

C. TROCHULUS, Reeve. Pl. 3, fig. 43 *a*.

Shell white, with usually a violet tinge, interior of aperture light violet. Length, 1·25–1·5 inches.

Cape Verd Islands.

C. CUNEIFORMIS, Smith. Pl. 3, fig. 43.

White, faintly tinted with purple, spire, particularly towards the apex, stained with pale brown; interior of aperture light violet; spire with three or four fine spiral striæ; body-whorl with revolving grooves, which become obsolete upon its upper third. Length, 1 inch.

Habitat unknown.

Digitized by Google

Distinguished from *C. trochulus* by its narrower, straighter form, the sulcated body-whorl and striated spire.

C. CYANOSTOMA, A. Ad. Pl. 3, fig. 44.

Shell doubly striated on the spire, with revolving striæ towards the base; ash-color, with longitudinal, brown markings, aperture violaceous. Length, 1 inch.

West Africa.

May perhaps = *C. trochulus*, Reeve, as suggested by Weinkauff, but none of my specimens of the latter species have striæ on the spire, and they are all white, as in all the published figures.

C. CLARUS, E. A. Smith.

Shell abbreviately turbinate, rosy white, sulcate towards the base; spire depressed-conical, striate; angle of body-whorl carinated; aperture light rosaceous. Length, 27 mill.

West Australia.

An unfigured species, represented by a single specimen in the British Museum. It is said to somewhat resemble *C. cyanostoma*, A. Adams, but is narrower.

C. FRIGIDUS, Reeve. Plate 3, fig. 45.

Shell pale straw-color, violaceous at base and apex; spire three-grooved, revolving striæ on the lower part of the body-whorl, which become granulose towards the base.

Length, 1 inch.

Habitat unknown.

A species having no well-marked characters.

C. VENULATUS, Hwass. Pl. 3, figs. 46–50.

Color varying from light chestnut to dark chocolate, with indistinct darker revolving lines, irregularly marbled throughout with white; spire and lower part of body-whorl striate.

Length, 1·25–2 inches.

West Coast of Africa.

The synonyms are *C. nivosus*, Lam. (fig. 47), and *C. ateralbus*, Kiener. Dr. Weinkauff considers *C. unifasciatus*, Kiener, a juvenile of the species, but does not state his reasons; the figure is so different that I cannot agree to place the species here.

Digitized by Google

Var. NIVIFER, Brod. Pl. 3, figs. 48, 49.

The revolving lines of color are more distinct, with less of the white maculation.

Var. CROTCHII, Reeve. Pl. 3, fig. 50.

Shell smooth, striated at base and on the spire; white, very closely encircled throughout with fine thread-like burnt-brown lines, sometimes interrupted with a few snow-white spots, spire with the edge of the last whorl spotted with brown.

Saldana Bay, So. Africa; W. Africa.

Reeve describes this as a species, distinguishing it from *C. venulatus* by the striate spire; but the spire is distinctly striate in a large proportion of the specimens (some are smooth) of *C. venulatus* before me.

C. GENUANUS, Hwass. Pl. 3, fig. 51.

Shell pink-brown or violaceous brown, with revolving narrow lines of alternate white and chocolate quadrangular spots and dashes, these lines being usually alternately larger and smaller. The surface is usually smooth, but sometimes the lines are slightly elevated; spire smooth. Length, 1·5–2 inches.

Senegal, Guinea, Moluccas.

C. PROMETHEUS, Hwass. Pl. 3, fig. 52.

Shell narrow, rather thin, spire sulcate; white, variegated with numerous lines of short dashes and spots of light chestnut. Length, 3–9 inches.

E. Africa, Madagascar, Senegal (Mus. Acad. Nat. Sciences).

This is the largest of the Cones, and is of very light build, considering its size. A magnificent series is before me, including the individual measuring nine inches in length, and which were brought to Philadelphia by a vessel trading to the Gaboon region. The smaller specimens approach too closely to *C. papilionaceus.*

C. FERGUSONI, Sowb. Pl. 4, fig. 52 *a.*

White, under a brown epidermis, lightly striulate transversely; shell heavy, with slightly channeled spire. Length, 5·75 inches.

Panama (Ferguson).

This species, which I have not seen, appears very like a faded specimen of the last. The locality rests upon the original

Digitized by Google

description; none other of the numerous Panama collections published include any similar shell.

O. OMAICUS, Hwass. Pl. 4, fig. 53.

Shell narrow, whitish, encircled by numerous lines of square spots and dashes of orange-brown, often forming two or three broad bands by their approximation. Length, 2–2·75 inches.

Ins. Oma, Banda Group; Amboina.

Section III. FIGULINI.

Dendroconus, Swainson, Mörch.

C. BETULINUS, Linn. Pl. 4, figs. 54, 55.

Shell yellow or orange-brown, with revolving series of spots, and short lines of chocolate upon narrow white bands, spire radiated with chocolate; base of shell strongly grooved.

Length, 2·5–4 inches.

E. Africa, Isle of Bourbon, Ceylon, Java, China, Philippines.

Var. SURATENSIS, Hwass. Pl. 4, fig. 55.

Spots more numerous; the more rugose growth-lines cause them to be rather regularly interrupted, so that they form longitudinal as well as revolving series.

Philippines.

C. GLAUCUS, Hwass. Pl. 4, fig. 56.

Bluish ash or very light chocolate, with usually a lighter narrow central band, and numerous short chocolate lines in revolving series, spire broadly radiated with chocolate.

Length, 2 inches.

Sumatra, Borneo, Moluccas, Philippines.

Resembles *C. betulinus*, var. *Suratensis*, but may be distinguished mainly by its color.

C. FIGULINUS, Linn. Pl. 4, figs. 57, 58; Pl. 27, fig. 1.

Chestnut-color, encircled by numerous narrow chocolate lines, spire chocolate-colored. Length, 2–3·5 inches.

Ceylon, Java, Philippines, New Caledonia.

The body-whorl is occasionally narrowly light-banded in the middle.

Var. LOROISI, Kiener. Pl. 4, fig. 58.

Shell larger, with more depressed spire than usual in *figulinus;*

Digitized by Google

ash or chocolate cream-color, generally with an obscure light central band, sometimes with more or less obscure chestnut revolving lines, but generally these are absent; spire often radiately streaked with chestnut.

This variety is almost intermediate between the typical *C. figulinus* and *C. glaucus*, Hwass.

Var. CHYTREUS, Melvill. Pl. 27, fig. 1.

Shell small, slightly turbinated, brown, encircled with unevenly placed, thick, dark red-brown lines, aperture narrow, spire somewhat rounded. Length, ·63 inch. Smaller and with thicker and more irregular color-lines than the type; aperture narrower.

C. QUERCINUS, Hwass. Pl. 4, fig. 59.

Shell lemon-yellow, with numerous fine, rather close, chestnut revolving lines; spire rather elevated, with concave outline, the shoulder of the body-whorl obtusely angulated.

Length, 2–4 inches.

Red Sea, E. Africa, Mauritius, Ceylon, Philippines, Viti Islands, Sandwich Islands.

The revolving lines are much finer and closer than in the preceding species of this group; the form of the spire is also different. In old specimens the revolving lines become obsolete; the shell in this state has received the name of *C. ponderosus*, Beck.

C. PYRIFORMIS, Reeve. Pl. 4, figs. 60, 61.

Shell light flesh-color, the spire gently acuminate, the earlier whorls tuberculated, body-whorl pyriform, the outline concave below, with revolving striæ towards the base.

Length, 2–3 inches.

West Columbia, Panama, etc.

C. patricius, Hinds (fig. 61), is the young of this species.

C. CALIFORNICUS, Hinds. Pl. 4, figs. 62, 63.

Shell smooth, with convexly elevated spire, which is sometimes striate, and pyriform body-whorl, rounded or slightly angulated at the shoulder, and striated towards the base; light olive-brown, with or without obscure chestnut reticulations and maculations, sometimes light- or dark-spotted on the shoulder,

Digitized by Google

usually invested with a rather thin brown epidermis; aperture more or less tinged with chocolate. Length, 25–33 mill.

California.

C. dealbatus, A. Ad. (fig. 63), is a synonym.

C. UNIFASCIATUS, Kiener. Pl. 4, fig. 65.

Shell the general form of *C. Californicus;* chocolate, with a rather broad yellowish brown band just below the shoulder. Length, 1 inch.

Habitat unknown.

Dr. Weinkauff makes this a juvenile of *C. venulatus*, Hwass, but it does not appear to me to be closely allied to that species, either in form or coloring; on the contrary, its resemblance to *C. Californicus* is so great that I feel nearly certain that it should be united with that species.

C. SCALPTUS, Reeve. Pl. 4, fig. 64.

Shell turbinated, rather solid, polished, grooved towards the base; whitish, with numerous hair-like, light brown, revolving lines; spire spirally striated, rather elevated, with sharp apex, variegated with chestnut-color. Length, 1 inch.

Habitat unknown.

Dr. Weinkauff gives California as locality, but this must be considered very doubtful, as the numerous collectors on that coast have not yet discovered it.

Section IV. ARENATI.

Puncticulis, Swains., Mörch.

C. ARENATUS, Hwass. Pl. 4, fig. 66; Pl. 27, fig. 2.

Shell stoutly turbinated, coronated on the spire; white, sprinkled in a waved longitudinal manner with very small, close brown dots, sometimes forming indistinct bands; aperture usually light flesh-color. Length, 2 inches.

Red Sea, E. Africa, Ceylon, Philippines, N. Caledonia, Viti Isles.

Var. MESOKATHAROS, Melvill. Pl. 27, fig. 2.

Middle portion of body-whorl unspotted.

C. OBESUS, Hwass. Pl. 4, fig. 67.

Shell obsoletely coronated with tubercles, body-whorl somewhat convex, stout; white or very pale yellow or blush, faintly

Digitized by Google

clouded, with numerous small chestnut or chocolate spots and short lines, often forming dark clouds, so placed as to make interrupted, revolving bands. Length, 2–2·75 inches.

Ceylon, *Java*.

C. PULICARIUS, Hwass. Pl. 4, fig. 68; Pl. 5, fig. 69.

Shell white, the spire tuberculated, covered by dark chocolate or nearly black spots, which sometimes by their juxtaposition indicate two bands; epidermis, as in the other species of the group, very thin, translucent. Length, 1·5–2·5 inches.

Japan, *New Guinea*, *New Caledonia* to *Central Polynesia*.

C. fustigatus, Hwass (fig. 68), includes the varieties in which the spots are larger and less numerous.

C. VAUTIERI, Kiener. Pl. 5, fig. 70.

Spire tuberculate, sides of body-whorl nearly direct; white, with chestnut spots, overlaid here and there by lighter chestnut clouds. Length, 33 mill.

N. Caledonia, *Marquesas Islands*.

C. STERCUS-MUSCARUM, Linn. Pl. 5, fig. 71.

Shell with somewhat convex sides, a rather short, conical spire, which is broadly channeled, and acutely angulated shoulder; white with numerous revolving lines of chocolate and opaque white spots, and chocolate or chestnut cloudings forming interrupted broad bands; spire darkly maculated and spotted; aperture tinged more or less with flesh-color. Length, 2 inches.

Ceylon, *Java*, *Philippines*, *N. Australia*.

Section V. MURES.

Coronaxis, Mörch, not Swainson.

C. MUS, Hwass. Pl. 5, figs. 72, 73.

Shell with tuberculated spire, the body-whorl covered by narrow, raised revolving striæ; ash-white, longitudinally streaked and maculated with chestnut, the tubercles of the spire white, and usually a white band below the middle of the body-whorl; aperture chestnut-colored, with a central white band.

Length, 1–1·75 inches.

West Indies, *Florida*.

Digitized by Google

Var. ROSEUS, Lam. Pl. 5, fig. 73.

Shell usually larger, rosy-, or purple-, or even yellowish-brown, with white tubercles and a distinct white band below the middle of the body-whorl; the striæ are often punctate with chestnut, and the spire is spotted with chestnut between the tubercles; aperture rosy or chestnut-color with a central white band.

Length, 1·5–2 inches.

C. PUNCTATUS (Chemn.), Auct. Pl. 5, fig. 74.

Shell yellowish pink or light yellowish brown, with (usually) raised revolving lines closely marked with red or chestnut dots, indistinctly white-banded on the middle, and often at the shoulder of the body-whorl; spire with revolving striæ and brown maculations—which often extend irregularly down the body-whorl. Length, 1·5–2·25 inches.

West Africa, *Ceylon*, *Moluccas*, *West Indies* (Swift coll.).

C. HEBRÆUS, Linn. Pl. 5, figs. 75–77; Pl. 27, fig. 13.

Shell white, sometimes rose-tinted, with three or four revolving bands composed of irregular longitudinal dark chocolate or nearly black markings; these markings also ornament the slightly coronated spire; aperture white with clouded bands corresponding with the exterior markings; surface more or less striate throughout, but striæ more prominent towards the dark stained base. Length, 1–1·75 inches.

Ceylon, *E. Africa*, *Mauritius*, *Japan*,
Philippines, *New Caledonia* to *Viti Is.*, etc.

C. sphacelatus, Sowb. (fig. 76), is considered by Dr. Weinkauff, the juvenile of this species; that it is a very young shell is evident, but I am by no means convinced that it is properly placed here; Mr. Melvill, who possesses the type specimen, considers it a distinct species.

Var. VERMICULATUS, Hwass. Pl. 5, fig. 77.

The black markings are more continuous, so as usually to cover the length of the shell except an irregular white central band; sometimes these markings are impressed so that the intervening white spaces project granulously or tuberculately above the surface; occasionally also the entire surface becomes dark chocolate with the exception of the white band, and a white

Digitized by Google

spot here and there. Not so large as the type, rarely exceeding an inch in length.

C. MACULIFERUS, Sowb. Pl. 5, fig. 78.

Shell wide, with short spire, slightly coronate; yellowish white with two revolving series of irregular longitudinal chestnut markings, which are sometimes partially connected one with another in each series. Length, 30 mill.

Red Sea.

C. BALTEATUS, Sowb. Pl. 5, figs. 79–81.

Shell olive-brown or brown violaceous, with a more or less irregular white band below the middle, and another one below the tuberculated spire; interior of aperture tinged with violet. Length, 1 inch.

Philippines, Nicobar Islands, Mauritius.

C. pigmentatus, Adams and Reeve (fig. 80), and *C. cernicus*, H. Adams (fig. 81), are synonyms. In the latter, and sometimes also in the former, the painting is more or less obscurely maculated with white, but the specimens before me sufficiently indicate the identity of these species.

C. ENCAUSTUS, Kiener. Pl. 5, figs. 82, 83.

Spire depressed, grooved and coronated with tubercles, body-whorl with distant punctured grooves, more strongly and closely grooved towards the base; clouded with chocolate-and ash-color, and encircled with numerous chocolate and white spots in lines; aperture purplish. Length, 1·25 mill.

Marquesas Islands.

C. prætextus, Reeve (fig. 83), is a synonym.

C. MILIARIS, Hwass. Pl. 5, figs. 84–90; Pl. 27, fig. 12.

Shell with spire more or less raised, striate or sometimes nearly smooth, with or without tubercles; body-whorl striate, the striæ usually granulous towards the base, and sometimes throughout; yellowish or light chestnut or grayish, variously clouded with darker chestnut or olive, often irregularly light-banded at the middle, and below the spire, and encircled with chestnut spots on the striæ; interior chocolate, with a central white band.

Length, ·75–1·25 inches.

Red Sea to *Isle of Bourbon* and *Natal*,
and to *Sandwich* and *Galapagos Islands.*

Digitized by Google

A species of wide distribution, and apparently everywhere common. There is considerable variation in the height and coronation of the spire, as well as in the color and pattern of the markings, and the consequence has been the description of several species, which the large series of specimens before me compels me to unite. *C. minimus* of Linnæus has been identified with members of this group, but, as pointed out by Dr. Weinkauff, erroneously. The latter author has made *C. minimus* = *C. achatinus*. Hanley did not find any shell labeled *minimus* in the Linnean collection. The synonyms include *C. tiaratus*, Brod. (fig. 85), *C. fulgetrum*, Sowb. (fig. 86), *C. scaber*, Kiener (fig. 87), and *C. coronatus*, Dillw.

Var. ABBREVIATUS, Nuttall. Pl. 5, fig. 89.

The spots are more distant and somewhat more regularly disposed.

Sandwich Islands.

C. Barbadensis, Hwass (not Reeve), is probably identical, and does not inhabit the West Indies.

Var. ARISTOPHANES, Duclos. Pl. 5, fig. 90.

Shell violaceous gray, somewhat clouded with pink-white, the revolving lines milk-white, interrupted by chestnut short dashes and spots.

Red Sea, Philippines, Polynesia.

C. BACCATUS, Sowb. Pl. 6, fig. 92.

Shell minutely decussated, with regular rows of conspicuous granules; whitish, with large orange blotches arranged in three bands; spire-whorls concave, nearly smooth; body-whorl with a biangulate shoulder. Length, 23 mill.

Habitat unknown.

Described from a unique specimen in the collection of Dr. Prevost, of Alençon.

C. REFLECTUS, Sowb. Pl. 6, fig. 91.

Shell pear-shaped, anteriorly granulated, otherwise smooth, very minutely coronated, spire closely grooved; whitish, with two broad bands of rose-color clouded with brown.

Length, 25 mill.

Habitat unknown.

Described from a single specimen.

Digitized by Google

C. TÆNIATUS, Hwass. Pl. 6, fig. 93.

Shell indistinctly zoned alternately with pale violaceous and white, vividly encircled with fillets of dark chocolate and white articulations; spire obsoletely coronated.

Length, 1–1·25 inches.

Red Sea, Ceylon, China.

Very close to *C. genuanus* in general appearance, but the articulations are more regular in size and position, the spire is slightly tuberculate.

C. CEYLONENSIS, Hwass. Pl. 6, figs. 94–100.

Shell coronated, with rather depressed spire, granular striate towards the base; white, variously marbled with chestnut, often obscurely white-banded at the upper part and below the middle of the body-whorl, base tinged with violet.

Length, ·75–·9 inch.

Red Sea, Ceylon, West Africa, Mauritius, Australia, New Caledonia, Polynesia to *Sandwich Is., Mazatlan, Cape St. Lucas.*

C. nux, Brod. (fig. 95), and *C. pusillus*, Gould, are synonyms.

Var. ACUTUS, Sowb. Pl. 6, fig. 96.

Spire more elevated, shell smaller.

Ceylon.

Var. PUSILLUS (Chemn.), Auct. Pl. 6, fig. 97.

Shell white with revolving rows of chestnut spots. Varies from *Ceylonensis* in the same way that var. *abbreviatus* does from *miliaris*.

Var. TENUISULCATUS, Sowb. Pl. 6, fig. 98.

Lower half of the body-whorl finely sulcate; white marbled with light chestnut, with two darker bands, which are flecked with white; base and aperture violaceous.

Mauritius.

Var. SPONSALIS, Chemn. Pl. 6, fig. 99.

Body-whorl somewhat convex on the sides, wide at the shoulder, which is somewhat rounded; yellowish white, with a few chestnut or red zigzag longitudinal markings, forming an interrupted broad superior, and often a narrower inferior band; base violaceous.

Philippines, New Caledonia, Polynesia.

Digitized by Google

This is possibly a distinct species; in which case the preceding and following varieties should be placed with it.

Var. NANUS, Brod. Pl. 6, fig. 100.

Shell usually smaller than the type, white, under a thin, light yellowish brown epidermis, obsoletely maculated or occasionally spotted with chestnut, base violaceous.

Polynesia, *Australia*.

C. SPECIOSUS, Sowb. Pl. 6, fig. 1.

Spire minutely crenulated; irregularly marbled with chestnut and white. Length, ·8 inch. *Locality unknown.*

Is probably a juvenile shell; differs from *C. Ceylonensis* in the base being without violet tint.

C. COUDERTI, Bernardi. Pl. 6, fig. 2.

Spire not crenulated, marbled with chestnut and white, obscurely indicating three bands. Length, 1 inch.

Habitat unknown.

Closely related to the foregoing species; if identical, as surmised by Dr. Weinkauff, Sowerby's name will become a synonym.

C. RUTILUS, Menke. Pl. 6, fig. 3.

Shell thin, somewhat inflated, slightly coronated, surface covered by close, nearly obsolete revolving striæ; brown or brick-red, either unspotted or with faint darker dots in revolving series. Length, ·5 inch.

Australia, *Tasmania*.

C. Macleayanus and *C. Tasmanicus*, Tenison-Woods, are synonyms.

C. SMITHI, Angas. Pl. 6, fig. 4.

Shell not coronated, spirally grooved towards the base; straw-color or pink, clouded with pale chestnut, with (sometimes obsolete) revolving lines of chestnut and white articulations, and a faint white band; spire maculated with chestnut.

Length, ·5 inch.

Botany Bay (Brazier); *Port Stephens*, *Australia* (Cox).

Is perhaps only a variety of the preceding species.

C. PONTIFICALIS, Lam. Pl. 6, fig. 5.

Spire convexly elevated and tuberculated, whole surface covered by very fine minutely punctured revolving lines; epi-

Digitized by Google

dermis yellowish olive, very thin, usually persistent in a very broad band upon the body-whorl, but absent from narrow shoulder and basal bands, which, with the spire, are white.

Length, 1–1·25 inches.

Tasmania.

Section VI. VARII.

Coronaxis, *Stephanoconus* and *Leptoconus*, in part.

C. AURANTIUS, Hwass. Pl. 6, figs. 6, 7.

Shell with elevated, tuberculated spire; surface irregularly clouded with chestnut or orange and white, and minutely marked with interrupted narrow brown or orange revolving lines, more or less broken up into articulations; upon the lower half of the body-whorl these lines become striæ, and are distantly, minutely granular. Length, 1·5–2 inches.

Philippines, *Moluccas*, *New Caledonia.*

A narrow shell, with more conical spire than the common West Indian species, *C. nebulosus*. *C. leucostictus*, Gmel., includes several species; Sowerby's identification of it may be placed here.

C. VARIUS, Linn. Pl. 6, figs. 8–10.

White, marbled with orange, rose, chestnut or chocolate, with sometimes revolving lines of spots; spire with rather small tubercles, basal half of body-whorl with revolving grooves, upper half of body-whorl with revolving rows of tubercles, which become more distinct towards the spire. Length, 25–40 mill.

Australia, *New Caledonia*, *Philippines*, *Moluccas.*

The synonyms include *C. interruptus*, Mawe (fig. 10) = *C. pulchellus*, Sowb., not Swains., = *C. Hwassi*, A. Ad.

C. SUPERSCRIPTUS, Sowb. Pl. 6, fig. 11.

Shell smooth, strongly grooved anteriorly; whitish tinged with blue, irregularly ornamented with large yellowish blotches, and encircled by numerous narrow bands composed of letter-like spots; spire grooved, maculated; aperture tinged with purplish brown. Length, 27 mill.

Madagascar.

Described from a single specimen in the collection of the Marchioness Paulucci, Florence.

Digitized by Google

C. BŒTICUS, Reeve. Pl. 6, figs. 12–14.

Spire striate, slightly tuberculate, body-whorl granular, striate towards the base; white, marbled with chestnut or chocolate, with revolving rows of chestnut spots. Length, 1–1·5 inches.

Philippines, Moluccas.

C. rivularis, Reeve (fig. 13), in which the granules extend more or less over the entire surface, may be considered a synonym or slight variety, the variation being in the direction of the preceding species. *C. albomaculatus*, Sowb. (fig. 14), is a similar shell, and has priority of publication, but I am not positive as to its identity with *bœticus*.

C. MURICULATUS, Sowb. Pl. 6, fig. 15.

Shell with straight sides, and short conical spire, the shoulder sharply angulated and tuberculated; body-whorl strongly striate towards the base, encircled throughout with lines of granules; white, violet-tinged towards the base, with two light chestnut or yellowish brown, broad, irregular and somewhat indistinct bands.

Length, 1 inch.

Philippines.

C. PLUMBEUS, Reeve. Pl. 7, figs. 16, 17.

Shell violaceous, more or less marbled with chestnut, and more or less granular on the body-whorl; spire convexly conical, tuberculated; aperture violaceous. Length, 1 inch.

South Africa.

C. liratus, Reeve, is a juvenile of this species. It is closely related to *C. muriculatus*.

C. MOLUCCENSIS (Chemn.), Auct. Pl. 7, figs. 18, 19.

Shell coronated; yellowish white, marbled and streaked with chestnut, with minute revolving lines of granules which are often somewhat articulated red-brown and white.

Length, 1·6 inches.

Moluccas.

The synonyms are *C. Stainforthii*, Reeve, and *C. proximus*, Sowb. (Pl. 7, fig. 19); the latter less granulate and apparently not fully grown.

C. MAGELLANICUS, Hwass. Pl. 7, figs. 20–23

Shell smooth, with distant revolving striæ, the upper ones nearly obsolete; spire concavely depressed, with raised apex and

Digitized by Google

somewhat tuberculate; yellowish with a band of irregular white blotches dotted and shaded with chestnut in the centre, and smaller ones at the upper part and base; apex pink.

Length, 1 inch.

West Indies ?

Dr. Weinkauff quotes several West Indian Islands as localities for this species, but it is not in the Swift collection of W. I. shells, nor does it occur in Mr. Krebs' catalogue. Possibly it is a variation of *C. nebulosus*, Linn.

C. speciosissimus, Reeve (fig. 21), is a variety, according to Dr. Weinkauff, and *C. Lubeckianus*, Bernardi (fig. 22), is a pale example of it. Sowerby considers *C. cidaris*, Kiener (fig. 23), another variety.

C. CARDINALIS, Hwass. Pl. 7, fig. 24.

Spire tuberculated; body-whorl encircled by lines of granules; yellowish pink or scarlet-pink, with an irregular central white band, which is occasionally spotted with brown.

Length, 1 inch.

Lesser Antilles, Venezuela ?

C. DIANTHUS, Sowb. Pl. 7, fig. 25.

Shell rather abbreviately conical, pale pink, with irregular patches of orange; with rather distant revolving ridges and faint longitudinal striæ, undulating across the ribs and forming thereon minute scales; last whorl obscurely coronated; aperture pink within. Length, 28 mill.

Habitat unknown.

C. ARCHON, Brod. Pl. 7, figs. 26–29.

Spire concavely elevated, not coronated; body-whorl smooth, slightly striate below; irregularly marbled with chestnut and white, with equidistant chestnut revolving lines bearing white spots. Length, 1·5–2·75 inches.

West Coast of Central America.

C. castaneus, Kiener (fig. 27), is a synonym.

Var. GRANARIUS, Kiener. Pl. 7, fig. 29.

The white spots upon the revolving lines are granularly elevated.

C. sanguineus, Kiener (fig. 28), is a similar shell.

Digitized by Google

C. LAMBERTI, Souverbie. Pl. 7, fig. 30.

Shell smooth; orange-brown, with large subtriangular white patches, mostly arranged so as to indicate three broad bands.

Length, 107 mill.

New Caledonia.

C. NEBULOSUS, Solander. Pl. 7, figs. 31–34.

Spire concavely elevated, tuberculate, closely striate; nebulously painted with orange-brown, chestnut or chocolate and white, the latter forming usually an interrupted and irregular central band, besides being miscellaneously disposed on other parts of the surface; encircled by close narrow brown lines, which are sometimes slightly raised. Length, 1·5–2·25 inches.

West Indies and *the adjoining shores of N. and S. America.*

The variations of this beautiful species in the shades and pattern of coloring are almost endless. It is the *C. leucostictus*, Gmelin, of Crosse, and includes also the *C. Barbadensis* of Reeve, not Hwass, *C. solidus*, Chemn., and *C. cedo-nulli*, Hwass (figs. 32–34). The latter has usually been considered a distinct species, but its characters of narrower shoulder and spotted lines have no distinctive value.

C. TAYLORIANUS, E. A. Smith. Pl. 7, fig. 35.

Spire coronate, body-whorl with punctate revolving grooves; very dark chocolate, with a few white patches.

Length, 20 mill.

Australia?

C. BRUNNEUS, Gray. Pl. 7, figs. 36, 37.

Spire short conical, tuberculate; chestnut-brown, lineated with chocolate, with sometimes longitudinal white maculations forming a broad central interrupted band, and a few additional maculations on other portions of the surface; base subgranularly striate. Length, 1·75 inches.

W. Coast of Cent. America, Galapagos Is.

Rather closely related to varieties of *C. nebulosus*. The uniformly brown-colored specimens = *C. diadema*, Sowb. (fig. 36).

C. GLADIATOR, Brod. Pl. 8. fig. 38.

Spire rather depressed, tuberculate and striate; chocolate-brown, variegated with white, disposed in longitudinal streaks, with an irregular white band, and more or less distinct revolving

Digitized by Google

lines of darker brown; interior white or tinged with chocolate; epidermis fibrous. Length, 1·25–1·75 inches.

West Coast of Cent. America.

Too closely allied to *C. brunneus*.

C. SUFFUSUS, Sowb. Pl. 8, figs. 39, 40.

Shell tuberculate on the spire, entire surface with revolving fine striæ, becoming faint or obsolete above; rosy, more or less faintly three- or four-banded with light chestnut; epidermis thin, light olivaceous. Length, 2·25 inches.

New Caledonia.

Crosse's var. *Noumeensis* (fig. 40) can be united with the typical *suffusus*, its distinctive character being slight.

C. PRINCEPS, Linn. Pl. 8, figs. 41–43.

Shell with low, distantly but distinctly tuberculated spire, and direct sides, slightly striate at the base; yellowish brown, orange or pink, sometimes without markings, but usually with irregular longitudinal chestnut or chocolate strigations most of which are continuous from spire to base, and varying from fine and close to heavier and more distant markings; interior yellow or pink; epidermis dark brown, fibrous, with distant revolving series of tufted spots. Length, 1·5–2·25 inches.

West Coast of Central America.

The broad-striped state is *C. regius*, Chemn. (fig. 42); that with the stripes obsolete, *C. lineolatus*, Val. (fig. 43).

Section VII. AMMIRALES.

Leptoconus, Mörch. *Rhizoconus*, Mörch, pars.

C. AMMIRALIS, Linn. Pl. 8, figs. 44–46.

Chestnut-color with darker revolving lines, and upper, basal and one or two approximate bands, finely reticulated with yellow on a white ground; this pattern is overlaid with large, irregularly disposed triangular white spots. Length, 2·5 inches.

Madagascar, Ceylon, Mauritius, East Indies, Philippines, New Caledonia.

C. archithalassus, Dillw. (fig. 45), is a variety with coronated spire; in another variety figured by Kiener (fig. 46), the revolving lines are elevated into granules.

Digitized by Google

C. NOBILIS, Linn. Pl. 8, figs. 47–49.

Spire depressed, with sulcate and finely striate volutions, shoulder-angle sharp; yellowish brown or chestnut, with close revolving lines of numerous small chestnut spots, whole surface irregularly overlaid by triangular large white spots.

Length, 2–2·5 inches.

Philippines, *Moluccas*, *Andaman Is.*

C. cordigerus, Sowb. (fig. 48), and *C. victor*, Brod. (fig. 49), are synonyms.

C. THALASSIARCHUS, Gray. Pl. 8, figs. 50, 51.

Spire depressed and nearly smooth, with a sharp angle; white, longitudinally and angularly reticulated with chestnut lines, chocolate-tinted at the base; sometimes with an irregular central white band covered by revolving lines of spots, and occasionally with yellowish bands above and below the latter and similarly spotted. Length, 2–3 inches.

Philippines, *Red Sea* (Jickeli).

C. castrensis, Gould, has priority of publication, but as that name has not obtained currency, it is, perhaps, best not to revive it.

C. AMADIS (Martini), Auct. Pl. 8, fig. 52.

Spire striate, channeled, concavely elevated, sharp-pointed, shoulder-angle sharp; lower part of body-whorl punctured-grooved; orange-brown to chocolate-colored, thickly covered with large and small subtriangular white spots, which by their varied disposition sometimes form a white central band, or dark bands above and below the centre—the latter occasionally bearing articulated revolving lines. Length, 2·5–3·5 inches.

Ceylon, *Java*, *New Caledonia*, *Polynesia.*

C. WEINKAUFFII, Löbbecke. Pl. 8, fig. 53.

Spire gradate; body-whorl striate towards the base; whitish, encircled by numerous alternate rows of large and small oblong chocolate blotches. Length, 80 mill.

New Caledonia.

C. COXENI, Brazier. Pl. 9, fig. 58.

Shell fusiform, thick, heavy, with twenty deep, spiral punctated

Digitized by Google

lines below, and three at the shoulder-angle; marked with brown flames and white and brown dots in revolving series.

Length, 1·25 inches.

Moreton Bay, Australia.

C. ACUMINATUS, Hwass. Pl. 8, fig. 54; Pl. 9, fig. 55.

Spire channeled, concavely elevated; yellowish or pink-white, with a network of chestnut or chocolate; sometimes indistinctly banded, with lines of spots on the bands; aperture generally rose-tinted. Length, 1·5–1·75 inches.

Red Sea.

Besides being smaller, the pattern of coloring on this shell differs from that of *C. Amadis* by being reticulated rather than triangularly spotted. *C. insignis*, Sowb., is a synonym.

Var. CUNEATUS, Sowb. Pl. 9, fig. 55.

Shell not reticulated; pink-white, with two pale yellow bands and a very few chestnut spots on the body-whorl and spire; aperture rosy. At first sight appears distinct. Jickeli has figured it as a variety, in his paper on the Cones of the Red Sea.

C. SCHECH, Jickeli. Pl. 9, fig. 56.

Shell narrow; yellowish, reticulated with chestnut or chocolate, with two broad, spotted dark bands. Length, 1–1·5 inches.

Red Sea.

Is perhaps only an extreme variety of *C. acuminatus*, Hwass. It is the *C. Neptunus* of Kiener (not Reeve), and is figured by Sowerby as a variety of *C. Amadis.*

C. NODULOSUS, Sowb. Pl. 9, fig. 59.

Shell with elevated, channeled spire; yellowish, delicately and openly reticulated with chestnut; aperture roseate.

Length, 2 inches.

Australia (Taylor collection).

The locality is very doubtful, as is also the claim of the shell to recognition as a species distinct from *C. acuminatus.*

C. LUCTIFICUS, Reeve. Pl. 9, fig. 60.

Spire rather elevated, channeled; body-whorl with straight sides, closely grooved towards the base; whitish, stained and longitudinally streaked with reddish brown, and encircled with

Digitized by Google

interrupted fillets of a darker brown, leaving a whitish band around the centre and along the upper margin; spire tessellated.

Length, 37 mill.

Habitat unknown.

Dr. Weinkauff supposes this to be a variety of *C. acuminatus*, Hwass; it appears to me to be too close to *C. monile*, Hwass.

C. BIFASCIATUS, Sowb. Pl. 9, fig. 61.

Shell rosy white, with a chestnut band on the spire, one above the middle and another at the base of the body-whorl.

Length, 1 inch.

Habitat unknown.

An obscure species, only known by Sowerby's figure and A. Adams' description of *C. fasciatus* (preoccupied).

C. SPICULUM, Reeve. Pl. 9, fig. 62.

Shell narrowly fusiform, with greatly elevated spire; body-whorl ridged at the base; whitish, with a few chestnut spots.

Length, 1 inch.

Philippines.

Said by Reeve to differ from the young of *C. generalis;* it is, however, undoubtedly a young shell. Several specimens occurred to Cuming, dredged at 25 fathoms.

C. SUBCARINATUS, Sowb. Pl. 9, fig. 63.

Shell smooth, sulcate towards the base; white, tinted with very light purple, with brown, angulated longitudinal flames, interrupted by a central white band; a variety has two wide bands, ornamented with interrupted revolving lines.

Length, 40 mill.

Nicobar Isles.

I am not acquainted with this species.

C. FULGURANS, Hwass. Pl. 9, figs. 65, 66.

Shell ovately conical, rather solid, spire broadly channeled, base distantly grooved; white, with rust-brown flexuous longitudinal flames, and a white central band, with revolving row of spots. Length, 40 mill.

Moluccas, N. Australia (Brazier).

Dr. Weinkauff makes *C. eximius*, Reeve (fig. 66), = the young of this species.

Digitized by Google

C. MALACCANUS, Hwass. Pl. 9, fig. 64.

Spire slightly convex, apex elevated, flatly channeled; base sulcate; white, doubly banded with pale orange-red, the lower band being the wider, variegated between the bands by chestnut longitudinal lines and clouds, and occasional revolving series of short lines—the latter often bordering the bands also.

Length, 2·5 inches.

Ceylon, Nicobar Is., Malacca.

Nearly the same pattern of coloring as in *C. generalis*, but differing in the revolving short lines.

C. DELESSERTIANUS, Recluz. Pl. 9, fig. 67.

Shell with concavely elevated, sulcated spire, body-whorl grooved towards the base; yellowish white, three-banded with orange-brown, spotted and flamed with chestnut.

Length, 2·3 inches.

Isl. of Socotra, E. Africa.

Somewhat peculiar in its elevated spire and acuminated body-whorl.

C. CENTURIO, Born. Pl. 9, fig. 68.

Whorls of the rather low spire with shallow sulcus, body-whorl grooved towards the base; yellowish brown, two-banded with white, the whole surface overlaid with longitudinal flames and short streaks and zigzags of chestnut-color; spire chestnut-flamed. Length, 2–2·5 inches.

West Indies, Venezuela, Guiana.

C. ANABATHRUM, Crosse. Pl. 9. fig. 69.

Spire elevated, gradate, body-whorl grooved towards the base; pale yellowish brown, with a central white band and scattered white maculations, obscurely encircled by lines of light chestnut spots. Length, 1 inch.

Hab. unknown (Crosse); *Mauritius* (Weinkauff).

C. ARTICULATUS, Sowb. Pl. 9, fig. 70.

Chestnut-colored, with revolving lines articulated with chocolate and white, a central white band and another below the angle of the spire. Length, 18 mill.

Mauritius.

Dr. Weinkauff makes this a synonym of the preceding species.

Digitized by Google

C. TEGULATUS, Sowerby. Pl. 9, fig. 71.

Shell rather narrow, with concavely elevated spire; body-whorl distantly sulcate throughout, between the sulci planilirate; white, with chestnut linear spots arranged in longitudinal flammules, giving a tessellated appearance, and forming two obscure bands. Length, 21 mill.

China Sea.

C. MACARÆ, Bernardi. Pl. 9, fig. 72.

Orange-brown, with fine, close, faint chestnut revolving lines, a white band on the middle and another at the shoulder of the body-whorl, both marked or bordered by irregular chestnut blotches. Length, 40 mill.

Mauritius.

C. MONILE, Hwass. Pl. 9, fig. 73.

Spire nearly plane, with raised apex, chestnut-flamed; body-whorl closely striate below, and generally chestnut-stained at the base; white, with oblique flames, spots and short lines of chestnut arranged in revolving series.

Length, 2–2·5 inches.

Ceylon, Java, Philippines.

C. GENERALIS, Linn. Pl. 9, fig. 74; Pl. 27, fig. 4.

Spire rather plane, with acuminate, raised apex; orange-brown to chocolate, irregularly white-banded at the shoulder, in the middle, and at the base, the bands overlaid with zigzag or irregular chocolate-colored markings. Length, 2·5 inches.

Red Sea, Ceylon, Isle of Bourbon, E. Africa, E. Indies, Philippines, N. Caledonia.

C. spiroglossus, Desh. (fig. 4), is a juvenile of this species.

C. MALDIVUS, Hwass. Pl. 9, fig. 75; Pl. 10, fig. 76.

Shell encircled by distant revolving lines of small spots; sometimes irregularly clouded with white, not forming bands; at other times irregularly banded. Length, 2–3 inches.

Red Sea, Ceylon, Maskarene and *Maldive Is.*

Is possibly only a variety of *C. generalis.*

C. TRAVERSIANUS, Smith. Pl. 10, fig. 86.

Shell narrow, distantly sulcate, the upper sulci nearly obsolete; pale pink, with two broad orange-red bands, and with revolving

Digitized by Google

lines of red and white articulations; aperture rose-colored; spire grooved, dotted with red and white at the sutures.

Length, 43 mill.

Habitat unknown.

C. BAYANI, Jousseaume. Pl. 10, fig. 87.

White, with longitudinal streaks and clouds of light chestnut, forming two interrupted broad bands, upon which are vestiges of a few narrow revolving lines of chocolate. Length, 55 mill.

? *Isle of Bourbon.*

C. GUESTIERI, Lorois. Pl. 10, fig. 88.

Shell with distant revolving grooves; orange-brown, with a narrow central band of white maculations; spire tessellated, striate. Length, 14 mill.

Habitat unknown.

Probably a young shell.

C. VOLUMINALIS, Hinds. Pl. 10, figs. 77, 78.

Shell whitish or yellowish white, usually faintly lined with yellow or light chestnut, with two bands of irregular longitudinal light chestnut blotches. Length, 1·5 inches.

Malacca.

Var. FLORIDULUS, Ad. and Reeve. Pl. 10, fig. 78.

Rosy white, the bands more continuous, base violet-tinted.

C. LORENZIANUS, Chemn. Pl. 10, fig. 79.

Shell pinkish white, longitudinally interruptedly strigate with chestnut, forming, by the regular breaks, numerous revolving zones. Length, 1·5–2 inches.

West Indies (Weinkauff).

The locality given for this species is very uncertain.

C. VIRGATUS, Reeve. Pl. 10, figs. 80–82.

Shell pinkish white, rather narrow, continuously but irregularly longitudinally strigate with chestnut. Length, 1·5–2 inches.

W. Coast of Central America.

This is the *C. Lorenzianus* and *C. zebra* of Reeve's Iconica. *C. Cumingii*, Reeve, in part (fig. 81), and *C. sanguinolentus*, Reeve (fig. 82), are varieties in which the longitudinal strigations are obsolete, or nearly so.

C. SCALARIS, Valenc. Pl. 10, fig. 83.

Spire elevated, gradate, maculated with chestnut; body-whorl

Digitized by Google

somewhat acuminate below; yellowish white with brown-chestnut longitudinal strigations, scarcely interrupted for a narrow central white band, and replaced towards the base by a few revolving rows of chestnut markings. Length, 3 inches.

Panama to *Gulf of California.*

C. FLAVESCENS, Gray. Pl. 10, fig. 84.

Shell smooth, grooved towards the base; yellowish, variegated with large irregular white blotches, arranged mostly just below the shoulder-angle, and below the middle of the body-whorl, so as to form two interrupted bands. Length, ·75–1 inch.

So. Australia? Ceylon?

C. LARGILLIERTI, Kiener. Pl. 10, fig. 85.

Spire rather elevated, maculated; light chestnut, with darker revolving lines of spots, and usually a white central band.

Length, 1·25–1·75 inches.

Yucatan.

This is the *C. Japonicus*, Brug., according to Mr. Sowerby, but Kiener's identification of that undetermined species is quite different.

C. PEALII, Green. Pl. 10, figs. 89–92.

Spire conically elevated; body-whorl grooved on the lower half; yellowish, maculated with chestnut, with numerous white and chestnut dots arranged in revolving lines; spire sparingly strigate with chestnut, the strigations give the appearance of depressions upon the sharp angle of the body-whorl, so that at first sight this appears as though coronated.

Length, ·75–1·25 inches.

Florida, Bahamas.

C. Stearnsii, Conrad (fig. 91), and *C. candidus*, Kiener (fig. 92), are synonyms.

C. LEMNISCATUS, Reeve. Pl. 10, fig. 93.

Shell with slightly contracted sides; spire acuminated with strong growth-lines; body-whorl delicately ridged throughout; whitish, maculated with chestnut, and every alternate ridge chestnut-spotted. Length, 1·5 inches.

Habitat unknown.

C. sagittatus, Sowerby, was described sixteen years later from the same specimen.

Digitized by Google

C. CLEBII, Reeve. Pl. 10, fig. 94.

Shell finely ridged throughout; white, variegated with chocolate longitudinal flammules and streaks. Length, 1·25 inches.

Brazil, *Venezuela*, *West Indies*.

C. MINUTUS, Reeve. Pl. 10, fig. 95 *a*.

Shell flesh-color, with two approximate, central brown bands. Length, 9 mill.

Island of St. Vincent, *West Indies*.

This is a very young shell, and should not have been described as a distinct species, as its adult state is very probably known under another name.

C. EMARGINATUS, Reeve. Pl. 10, figs. 95, 96.

Shell with conically elevated, channeled spire; body-whorl grooved below, its sides concave; white, longitudinally streaked and flamed with chocolate. Length, 45 mill.

Venezuela to *Brazil*.

Very probably equals *C. Clerii*, from which it differs mainly in the want of striæ on the upper portion of the body-whorl, and its somewhat more concave sides. *C. lentiginosus*, Reeve (fig. 96), is considered a variety by Dr. Weinkauff.

C. VILLEPINI, Bernardi and Fischer. Pl. 10, fig. 97.

Shell smooth, with sharply angled shoulder, grooved towards the base, and striate spire; yellowish white, with chocolate maculations forming three obscure bands. Length, 30 mill.

Marie Galante, *West Indies*.

Is possibly a variety of *C. emarginatus*.

C. REGULARIS, Sowb. Pl. 11, figs. 98–2.

Shell white or yellowish white, with chestnut-chocolate maculations and spots, variously arranged in revolving series; sometimes the ground-color of the shell is chestnut, with dark chocolate markings and chocolate aperture; spire somewhat concavely elevated, with acute apex; epidermis thin, smooth, translucent. Length, 1·5–2·5 inches.

Panama to *Mazatlan*, *Guaymas*.

One of the most characteristic species of the West Coast of Mexico. Its synonyms include *C. dispar*, Sowb. (fig. 2), *C. incurvus*, Kiener (fig. 100), and *C. angulatus*, A. Ad. (fig. 1).

Digitized by Google

C. SELECTUS, A. Adams. Pl. 11, fig. 3.

Shell thin, encircled by brown punctate lines, contracted and sulcate at the base, slightly swollen at the sides, acutely angulate at the spire. Length, 1 inch.

Habitat unknown.

A species of doubtful validity, not very different from the following.

C. FLORIDANUS, Gabb. Pl. 11, figs. 4, 5.

Spire elevated, somewhat tabulate; body-whorl with straight sides, grooved towards the base; yellowish white, mottled and streaked with chestnut, with an obscure central white band, and another narrower one at the shoulder, between the bands often encircled with rows of brown spots. Length, 1·4–2 inches.

Florida, Bahamas.

C. Floridensis, Sowb. (fig. 5), is a synonym.

C. SIEBOLDII, Reeve. Pl. 11, figs. 6, 7.

Spire rather elevated, the sutures sharply carinate; body-whorl narrow, grooved below; white, with a few central chestnut blotches. Length, 2 inches.

Japan, China.

C. rarimaculatus, Sowb. (fig. 7), is probably the young of this species.

C. PAPILLARIS, Ad. and Reeve. Pl. 11, fig. 8.

Spire elevated, somewhat tabulate, finely tuberculated; white, longitudinally streaked in a clouded manner with orange-brown. Length, 1·75 inches.

Borneo.

C. GRADATULUS, Sowb. Pl. 9, fig. 57.

Spire elevated, gradate, with channeled whorls; body-whorl roseate; with three series of longitudinal maculations of chestnut-color, forming interrupted bands; aperture rosy. Length, 1·75 inches.

Agulhas Bank, So. Africa.

Described by Sowerby as *C. turritus*, a name preoccupied by Lamarck for a fossil species.

C. OPTABILIS, A. Ad. Pl. 11, fig. 9.

Spire elevated, slightly gradate, body-whorl slightly grooved towards the base; color uniform roseate. Length, ·8 inch.

Habitat unknown.

Digitized by Google

A doubtful species; it may possibly = the preceding, but is proportionally stouter.

C. MAZEI, Desh. Pl. 11, fig. 10.

Shell long and narrow, with striated, conical spire, and smooth body-whorl, at base distantly punctate-striate; yellowish white, with rather distant rows of chestnut spots. Length, 60 mill.

Martinique; deep sea.

A remarkable species, of which a single specimen was obtained as above.

Section VIII. CAPITANEI.

Rhizoconus, pars, Mörch.

C. SUMATRENSIS, Hwass. Pl. 11, figs. 11, 12.

Spire usually somewhat convex, striate, white, broadly flamed with chocolate; body-whorl white or yellowish brown, with irregular chocolate longitudinal strigations; partially interrupted so as to form a central white band. Length, 2·5–3·5 inches.

Red Sea; ? Sumatra.

Var. NEMOCANUS, Hwass. Plate 11, fig. 12.

The longitudinal markings are less defined, broader, and give a darker shade to the shell.

Red Sea, E. Indies, Mauritius, Philippines, N. Caledonia.

C. badius, Kiener, and *C. lævigatus*, Sowb. (in part), are synonymous.

C. VEXILLUM, Gmelin. Pl. 11, figs. 12 *a*, 13, 14.

Shell large and rather thin; spire striate; yellowish or chestnut-color, with an irregular white central band, sometimes obsolete, and occasionally another interrupted band at the shoulder; spire variegated with white and chestnut broad flames, the latter often overlaying also the lighter chestnut of the body-whorl.

Length, 3–4·5 inches.

E. Africa, Ceylon, Java, Philippines, N. Caledonia, Samoan Isles.

This species includes *C. lævigatus*, Sowb., pars (fig. 13), and possibly *C. Robillardi*, Bern. (fig. 14); the latter a young shell.

Digitized by Google

C. CONCOLOR, Sowb. Pl. 11, fig. 15.

Spire striate; entire surface uniform cinnamon-brown color, encircled on the body-whorl by narrow brown lines.

Length, 2 inches.

India, China.

Perhaps only a variety of the preceding species.

C. MUTABILIS (Chemn.), Auct. Pl. 12, figs. 19, 20.

Shell somewhat swollen above, spire striate; light yellowish brown, variegated by darker strigations, and faint revolving lines or rows of spots, often indistinctly lighter-banded in the middle. Length, 1·75–2·5 inches.

Red Sea, E. Indies, China.

C. hyæna, Reeve, not Hwass (fig. 20), is a synonym.

C. MILES, Linn. Pl. 11, fig. 16; Pl. 27, fig. 11.

Spire obsoletely tuberculate or smooth; rather depressed; body-whorl spirally ridged at the base; yellowish white, with close narrow thread-like longitudinal chestnut strigations, interrupted by a chocolate revolving band above the middle, base stained chocolate; aperture banded, chocolate and white.

Length, 2–4 inches.

E. Africa, Ceylon, Japan, Philippines, N. Caledonia, Central Polynesia.

C. CAPITANEUS, Linn. Pl. 12, figs. 21–24; Pl. 11, figs. 17, 18.

Spire low, striate, flamed with chocolate and white; body-whorl yellowish, or orange-brown, encircled by rows of chestnut dots, usually stained chocolate at the base, there is a central white band, with chocolate hieroglyphic markings on either side, and a shoulder-band, crossed by chocolate smaller longitudinal markings; aperture chocolate, with a white band.

Length, 2–3 inches.

Ceylon, Philippines, Australia, N. Caledonia, Polynesia, Mauritius.

Var. MUSTELINUS, Hwass. Pl. 11, figs. 17, 18; Pl. 12, figs. 23, 24; Pl. 27, figs. 5, 6.

The border-markings of the bands reduced to spots, the other revolving spots of the typical form absent. Clearly connected with the type by intermediate states.

Digitized by Google

C. citrinus, Kiener (fig. 18), and *C. sulphuratus*, Kiener (fig. 17), are half-grown and young specimens; *C. tenuis*, Sowb. (Pl. 27, fig. 5), is another young shell, but differing in color.

Var. CECILIÆ, Chenu. Pl. 12, fig. 24: Pl. 27, fig. 6.

Shell colored like the type, but encircled with punctations impressed in lines.

C. classiarius, Kiener (Pl. 12, fig. 24), is probably identical.

C. RATTUS, Hwass. Pl. 12, figs. 25–27.

Shell yellowish brown or ash-color, often with fine close chestnut revolving lines, with large white spots and maculations usually forming an interrupted central band and another at the shoulder. Length, 1·25–1·75 inches.

Red Sea, *Ceylon*, *New Caledonia*, *Tahiti*, etc.

C. Taheitensis, Hwass (fig. 26), is a color-variety of this species, and *C. viridis*, Sowb. (fig. 27), is an unusually colored juvenile.

C. SEMIVELATUS, Sowb. Pl. 12, fig. 29.

Shell plum-color, indistinctly light-banded in the middle and on the shoulder; aperture purple. Length, 16 mill.

Red Sea.

C. LISCHKEANUS, Weinkauff. Pl. 12, fig. 28.

Whorls of the spire with shallow channel, body-whorl smooth, striate at the base; sulphur-yellow, without ornamentation except maculations on the spire; aperture white. Length, 52 mill.

Japan.

Resembles *C. mutabilis*, Chemn., but is immediately distinguished by its channeled spire.

C. CLASSIARIUS, Hwass. Pl. 12, figs. 30–34.

Shell olive-brown, or ash-color, with a white central band, and usually another obsolete one below the shoulder-angle, encircled by numerous chestnut and white articulated lines; spire maculated with chestnut; aperture light chocolate with central white band. Length, 1·25–1·75 inches.

Red Sea.

C. Blainvillei, Kiener, and *C. splendidulus*, Sowb. (fig. 31), are identical, and *C. Ruppellii*, Reeve (fig. 32), and *C. adustus*, Sowb. (fig. 33), are young shells.

Digitized by Google

Var. PAZII, Bernardi. Pl. 12, fig. 34.

Shell whitish, with irregular orange-brown longitudinal maculations, interrupted to form a white band at the shoulder, another at the middle, and a third at the base of the body-whorl; everywhere encircled with small spots in revolving series.

C. TRIGONUS, Reeve. Pl. 12, fig. 35.

Somewhat triangularly ovate, grooved at the base; spire depressed, five-grooved, sharp at the apex; white, stained and banded with reddish brown, and encircled with numerous narrow delicately articulated filaments; spire tessellated.

Length, 1·25 inches.

Philippines.

C. AUREOLUS, Sowb. Pl. 12, fig. 36.

Spire rather depressed, with sharp apex, body-whorl striate below; yellowish, with light chestnut spots in revolving series.

Length, ·75–1 inch.

Habitat unknown.

The specimen of largest dimension is before me; it agrees perfectly with Sowerby's figure, and certainly is not fully grown.

C. COFFEA, Gmelin. Pl. 12, figs. 37–39.

Shell yellowish brown, white-banded in the middle and less distinctly so at the shoulder and base of the body-whorl; these bands are sometimes maculated, like the spire, with chestnut, and there are, on the darker portions, occasional faint chestnut revolving lines. Length, 2 inches.

Red Sea, East Africa, Malacca.

Closely united in characters with *C. rattus*, of which it may be only a variety; partakes also of the characters of *C. classiarius*, and less distinctly of *C. capitaneus*. It is not unlikely that these species, with *C. mustelinus*, will need to be united when we become better acquainted with the variations of the Cones. *C. excavatus*, Sowb. (fig. 38), and *C. incarnatus*, Reeve (fig. 39), are respectively fine and pale-colored varieties of *C. coffea*.

C. TURBINATUS, Sowb. Pl. 12, fig. 40.

Shell yellowish brown, with several narrow, lighter bands; grooved towards the base. Length, 1·75 inches.

Habitat unknown.

Digitized by Google

C. VITTATUS, Lam. Pl. 13, figs. 41–44.

Shell pink-brown, maculated or strigated longitudinally with light chestnut, with chestnut-dotted revolving striæ, and a central white, chestnut maculated band; spire convex maculated with chestnut. Length, 2 inches.

Panama, Real Llejos.

C. Cumingii, Reeve, in part (fig. 42), said to have been collected by Mr. Cuming at the Philippine Islands, appears to be synonymous.

Var. ORION, Brod. Pl. 13, figs. 43, 44.

Shell broader and more angular at the shoulder, spire not convex; color dark brown, with similar maculated white bands, and rather continuous revolving lines of darker brown. *C. Henoquei*, Bernardi (fig. 44), is probably identical.

Section IX. VIRGINES.

Lithoconus, pars, Mörch.

C. VIRGO, Linn. Pl. 13, figs. 45, 46.

Shell solid, rounded below the shoulder-angle, spire flatly convex, slightly striate throughout, more distinctly at the base; pale yellowish brown, tinged with violet at the base.

Length, 2·5–3·5 inches.

Red Sea, E. Africa, Ceylon, Philippines, New Caledonia, Polynesia.

The shells figured by Reeve, Weinkauff and Sowerby for *C. pastinaca*, Lam., are probably worn specimens of this species. *C. pastinaca* is a doubtful species, the specimens in the Lamarckian collection at Geneva including, besides the above form, others lined like *C. quercinus*.

Var. CŒLINÆ, Crosse. Pl. 13, fig. 46.

Spire nearly plane, body-whorl a little swollen below, and twisted so as to form a very oblique slight columellar fold.

New Caledonia.

Digitized by Google

✓ C. EMACIATUS, Reeve. Pl. 13, fig. 47.

Shell narrow, with depressed conical spire, ridged-striate throughout; light yellow, violet-stained at the base.

Length, 1·5 inches.

Java, *Philippines*, *Australia*, *N. Caledonia*, *Polynesia*.

Distinguished by its narrower form and raised striæ.

✓ C. FLAVIDUS, Lam. Pl. 13, figs. 48–50.

Shell yellowish to orange-brown, with an obscure lighter band below the shoulder and in the middle, encircled by ridged striæ, sometimes nearly obsolete above, base stained purple; aperture orange or violaceous, with a white central band.

Length, 1·5–2·25 inches.

Red Sea, *E. Africa*, *Ceylon*, *Java*, *Australia*, *New Caledonia*, *Polynesia*.

C. Maltzanianus, Weinkauff (fig. 49), is founded on highly colored specimens, with more rounded shoulder, the striæ rather more distant, sometimes subgranulous. These characters are common in some of the Tahitian specimens, but have no distinctive value.

C. mirmillo, Crosse (fig. 50), described from a single specimen without locality in the Cumingian collection, is of the same general character as *C. Maltzanianus*.

Var. PEASEI, Brazier.

Spire flat, sides slightly contracted in the middle, lip bright orange, stained with violet, epidermis thicker and rougher than the type. Described by Pease as *C. neglectus*, a name preoccupied by A. Adams. Pease subsequently considered it a mere variety of *C. flavidus*.

C. GLOYNEI, Sowb. Pl. 13, fig. 51.

Spire slightly coronate, deeply grooved; dark chestnut, lighter banded at the shoulder and in the middle of the body-whorl; aperture white. Length, 26 mill.

Habitat unknown.

C. LOMBEI, Sowerby. Pl. 13, fig. 52.

Shell smooth, sulcate anteriorly; reddish brown, maculated with white at the shoulder; aperture purplish. Length, 22 mill.

Mauritius?

Digitized by Google

C. ÆGROTUS, Reeve. Pl. 13, fig. 53.

Shell oblong, turbinated, rather thick, somewhat rudely twisted at the base, transversely obsoletely striated in a slightly waved manner, irregularly longitudinally marked with lines of growth; spire flatly depressed, minutely obsoletely carinated towards the apex; cream-color, marked with rows of very minute pale brown dots, leaving a white band in the centre; base dark livid violet. Length, 2 inches.

Philippines.

C. LIVIDUS, Hwass. Pl. 13, figs. 54–57.

Spire coronated, depressed conical, lower half of body-whorl distantly striated, and the striæ sparsely granulous; light yellowish or olivaceous to orange-brown, tubercles of the spire and a band below the shoulder, as well as a central band on the body-whorl, white, base and interior violaceous; epidermis somewhat tufted in distant revolving series. Length, 1·5–2 inches.

Red Sea to *Polynesia*, *E. Africa*, *Mauritius.*

Differs from *C. flavidus* in having coronated whorls, a character which I fear is not specific. *C. citrinus*, Gmel. (fig. 55, as usually, but perhaps incorrectly, identified, belongs here; Quoy, who describes the animal as bright red, calls it *C. sanguinolentus.*

Var. SUGILLATUS, Reeve. Pl. 13, fig. 56.

Tubercles oblique; spire-whorls flatly channeled, more or less stained brown; the white bands of the body-whorl more distinct, the brown surface more or less resolved into very close, faintly brown-spotted lines.

Var. CREPUSCULUM, Reeve. Pl. 13, fig. 57.

Pale yellow, without white bands, of much lighter growth than *C. lividus*, spire obsoletely finely beaded, aperture white. An obscure form. Length, 28 mill.

C. OBLITUS, Reeve. Pl. 13, fig. 58.

Shell narrow, with convexly depressed, tuberculated spire, body-whorl striate below; yellowish olivaceous, indistinctly white-banded in the middle, tubercles, and a band below the shoulder also white, base and aperture violaceous.

Length, ·9–1·25 inches.

Philippines.

Digitized by Google

Dr. Weinkauff makes this a variety of *C. lividus*, but it is always smaller, much narrower, somewhat differently colored, etc. Described by Mr. Reeve as *C. elongatus*, but that name being preoccupied by Chemnitz, he changed it as above; subsequently Crosse, ignorant of the change of name made by Reeve, proposed to call the species *C. Moreleti*.

C. Moussoni, Crosse. Pl. 13, fig. 59.

Shell minutely coronated, citron-yellow, rarely maculated longitudinally with white; aperture and base of columella white. Length, 27 mill.

Seychelles Isles.

C. pryntanis, Sowb. Pl. 13, fig. 60.

Shell strongly coronate; brown, with a light central narrow band; aperture purplish. Length, 35 mill.

Galapagos Is.

C. Evelinæ, Sowb. Pl. 13, fig. 61.

Shell coronated; yellowish brown, longitudinally striped with darker color, with a central pale band. Length, 28 mill.

Habitat unknown.

Narrower and less strongly tuberculate on the spire than the last species.

C. primula, Reeve. Pl. 13, fig. 62.

Shell light yellowish brown, white around the tubercles, with a central band of large oblong cream-white spots. Length, 1·25 inches.

Natal, Australia, Polynesia.

C. Cibieli, Kiener. Pl. 13, fig. 63.

Shell finely coronated, dark brown, with a central whitish band. Length, 1 inch.

Habitat unknown.

This species remains unrecognized; it appears to differ from *C. lividus* mainly in the absence of violet coloring at the base.

C. tabidus, Reeve. Pl. 13, fig. 64.

Shell turbinated, slightly pyriform, thin, everywhere grooved, basal grooves wider and rather deep, the others irregular, very fine, waved, white, entire surface peculiarly sculptured with

Digitized by Google

longitudinal striæ, spire rather obtusely convex, obsoletely coronated. Length, 34 mill.

West Africa.

I am not acquainted with this species.

C. HEPATICUS, Kiener. Pl. 14, fig. 65.

Shell conically turbinated; spire flat-convex, slightly channeled; body-whorl grooved towards the base; white, brown-stained at the apex. Length, 1·75 inches.

Habitat unknown.

An obscure form, of very doubtful specific value.

C. ALBICANS, Sowb. Pl. 14, fig. 66.

Spire depressed, with raised apex, compressedly tuberculate; body-whorl smooth, grooved towards the base; white, base stained with violet-chestnut. Length, 1·7 inches.

Habitat unknown.

I have before me two specimens, agreeing perfectly with Sowerby's figure. The shell differs in form, thickness and coloring from all the varieties of *C. lividus.*

C. UNICOLOR, Sowb. Pl. 14, fig. 67.

Shell long and narrow, spire convex, distantly tuberculate, body-whorl smooth, substriate towards the base; fawn-color, tinged with violet, aperture violaceous. Length, 1·7 inches.

Habitat unknown.

May possibly be a variety of the preceding species.

C. DISTANS, Hwass. Pl. 14, figs. 68, 69.

Shell yellowish fawn-color, obsoletely banded with white at the middle and upper part, sometimes the bands are not continuous, but consist of irregular oblique markings; body-whorl encircled by obsolete impressed lines, stained with violet-chestnut towards the base; spire low, convex, with rather obtuse rounded tubercles; interior white, stained with light violet.

Length, 2–4·25 inches.

Isle of Bourbon, Philippines, N. Caledonia, N. Zealand, Tahiti, etc.

Digitized by Google

Section X. Dauci.

Rhizoconus, ex parte, Mörch.

C. DAUCUS, Hwass. Pl. 14, figs. 70–72.

Shell lemon- or orange-brown, grooved towards the base, with a pale, sometimes interrupted central band, and encircled throughout by rows of small chestnut spots—often obsolete; spire sometimes maculated with pale chestnut.

Length, 1–1·75 inches.

West Indies.

C. pastinaca, Kiener (not Lamarck), and *C. Reevei*, Kiener (fig. 71), are synonyms.

Var. ARCHETYPUS, Crosse. Pl. 14, fig. 72.

Spire obsoletely tuberculate, body-whorl irregularly banded in the middle and at the shoulder with yellowish pink, surface otherwise fulvous with rows of small revolving dots; aperture orange-red within. Length, 25 mill.

Habitat unknown.

Sowerby and Weinkauff have made this a variety of *C. daucus*, but I am not at all satisfied of this.

C. NARCISSUS, Lam. Pl. 14, fig. 73.

Shell with rounded shoulder and somewhat convex sides and spire, grooved towards the base; yellowish or orange-brown, sparsely maculated with white, and with an irregular white band below the middle; spire white, maculated with yellowish brown.

Length, 1·85 inches.

West Indies.

A doubtful species, and scarcely a member of this group, having more the form of *C. Mediterraneus*.

C. oculatus, Gmelin, is a somewhat similarly formed shell, yellowish, with white eyes scattered over the surface. It has not been identified, and is possibly an artificially ornamented shell.

C. LITHOGLYPHUS, Meuschen. Pl. 14, figs. 74, 75.

Spire plane-conical, rather low, body-whorl distantly striate, the striæ tuberculate towards the base; dark chestnut, encircled

Digitized by Google

at the shoulder and in the middle by white oblique blotches, forming interrupted bands, often dark-stained at the base.

Length, 1·5–2 inches.

Ceylon, *Philippines*, *New Caledonia*.

C. lacinulatus, Kiener (fig. 75), is a synonym.

C. ATTENUATUS, Reeve. Pl. 14, fig. 76.

Shell slenderly turbinated, attenuated towards the base, smooth; yellow or light orange-brown, longitudinally ornamented with a very few broad, waved white stripes; spire depressed, sharp-angled, tessellated with light orange-brown, apex raised, very sharp-pointed. Length, ·75 inch.

Habitat unknown.

C. SEYCHELLENSIS, G. and H. Nevill.

Shell like *C. lithoglyphus*, but constricted in the middle of the body-whorl, more attenuated at the base, with the whorls of the spire more convex; color uniform bright orange, here and there of a lighter shade, faintly stained with light brown at the extreme base. Length 39 mill., diam. 19 mill.

Seychelles Islands.

Not figured. The above is a copy of the original description.

C. SUTORIANUS, Weinkauff. Pl. 14, fig. 77.

Shell coronate, sulcate at the base; orange-brown with a faint light central band; aperture rosaceous; lower whorls of the spire maculated. Length, 18 mill.

Mauritius.

C. PULCHELLUS, Swainson. Pl. 14, figs. 78–80.

Shell smooth, rather thin, spire low-conical, with revolving striæ; usually maculated with chestnut; body-whorl striate below; yellowish or light chestnut, with large white blotches forming a band at the shoulder and another on the middle, encircled by narrow chestnut lines, which are often broken up into small dots; base and aperture usually violaceous.

Length, 1·75–2 inches.

Ceylon, *Philippines*, *Australia*, *N. Caledonia*.

In *C. cinctus*, Swains. (fig. 79), the narrow chestnut lines are continuous, the white blotches and interior of aperture are more or less suffused with rose-color. *C. connectens*, A. Ad. (fig. 80), is similar.

Digitized by Google

C. PLANORBIS, Born. Pl. 14, fig. 81.

Whorls of spire striate, maculate with chestnut; body-whorl with beaded striæ below, orange-brown or chestnut, frequently light-banded in the middle, and sometimes at the shoulder also, base darker-colored. Length, 1·25-2 inches.

Mauritius, *Ceylon*, *New Caledonia*, *Philippines*, *Polynesia*.

This species is called *C. senator*, Linn., by Reeve and others, but the description in the Systema Naturæ shows that the identification is wrong. Hanley was not able to identify *C. senator* in the Linnean collection. Sometimes the granular striæ cover the entire surface.

C. CIRCUMSIGNATUS, Crosse. Pl. 14, fig. 82.

Shell covered with orange-brown upon the body-whorl except at the shoulder, base and centre, where occur irregular bands or blotches of white, with narrow articulated lines of chestnut and white, sparingly maculated with orange-brown. Length, 30 mill.

Habitat unknown.

Dr. Weinkauff makes this = the granular variety of *C. planorbis;* he has evidently mistaken the articulations for granulations.

C. CHENUI, Crosse. Pl. 14, figs. 83, 84.

Shell thin, with depressed carinate and striate spire, which is yellowish, maculated with brown; body-whorl striated below, yellowish, with two series of longitudinal forked and irregular dark brown markings, interrupted in the middle and at the base; there are traces of distant narrow brown revolving lines; aperture white. Length, 2 inches.

New Caledonia.

In the Journal de Conchyliologie, 1874, Crosse says that this species is very close to some varieties of *C. planorbis*, but its system of coloration is more elegant. *C. Loebbeckeanus*, Weink. (fig. 84), appears to me to be only a slight color-variation. Finally, *C. Chenui* is closely related to varieties of the next species.

C. LINEATUS (Chemn.), Auct. Pl. 14, fig. 85.

Shell orange-brown to dark chestnut, finely narrowly lineated with a darker color, with white blotches arranged in upper, middle

Digitized by Google

and basal bands; spire striated and maculated; base of shell striated, the striæ sometimes granular. Length, 1·75–2·25 inches.

Red Sea, *East Africa*, *Ceylon*, *Philippines*, *Australia*, *New Caledonia*.

C. VITULINUS, Hwass. Pl. 14, figs. 86, 87; Pl. 15, fig. 88.

Orange-brown to chocolate, with white longitudinal maculations disposed in bands at the shoulder and below the middle; lower part of body-whorl with granular striæ; spire striate and maculate. Length, 1·5–2 inches.

Ceylon to *Philippines* and *Polynesia*.

Is probably only a variety of the preceding species, from which it is distinguished by the more longitudinal form of the white blotches, and the absence of the close revolving color-lines.

Var. CARPENTERI, Crosse. Pl. 15, fig. 88.

Chestnut-brown, with continuous yellowish bands at the shoulder and middle; spire maculated with chestnut and white. Length, 46 mill.

New Guinea.

C. AUGUR, Hwass. Pl. 15, fig. 89.

Shell creamy white, encircled by close rows of very small chestnut dots, with two bands of irregular brown markings, one above, the other below the middle of the body-whorl; spire maculated with brown. Length, 1·75–2·25 inches.

Ceylon.

C. LIGNARIUS, Reeve. Pl. 15, figs. 90–93.

Pale brown, with fine close lines of chestnut-brown, and one or two paler bands; shoulder somewhat obtuse; spire concavely elevated, with acute apex, uniform pale brown. Length, 2 inches.

Philippines.

Var. FURVUS, Reeve. Pl. 15, figs. 91, 92.

Revolving lines broken up into minute dots, form somewhat narrower, some of the spire-whorls finely beaded. Scarcely a variety. *C. Cecilei*, Kiener (fig. 92), is identical.

Var. FASCIATUS, Kiener. Pl. 15, fig. 93.

Lines of dots more distant, whitish, with irregular light brown bands above and below the middle, base brown-tinted.

Length, 2 inches.

Digitized by Google

C. MULTILINEATUS, Sowb. Pl. 15, fig. 94.

Shell turbinated, wide-shouldered; reddish chestnut, light-banded in the middle, with numerous lines of close-set chestnut dots; spire concavely elevated, tuberculate. Length, 40 mill.

Habitat unknown.

Closely allied to *C. lignarius*, but differs in its wider form, and tuberculated spire. Described from a single specimen.

C. KOBELTII, Löbbecke. Pl. 15, fig. 95.

Shell smooth, spire and base striate; yellowish brown, with a lighter median band. Length, 42 mill.

Habitat unknown.

Perhaps only a variety of *C. lignarius*.

Section XI. MAGI.

Pionoconus and *Phasmoconus*, Mörch.

C. CONSORS, Sowb. Pl. 15, figs. 96–100.

Spire depressed conical, with shallow channel, and revolving striæ, sometimes tessellated with chestnut; body-whorl rather narrow, somewhat convex, grooved towards the base, somewhat round-shouldered, rather thin; white, yellowish and orange-brown, variously clouded and indistinctly banded; aperture white. Length, 2–3 inches.

Moluccas, Philippines, New Caledonia.

C. carinatus, Swainson (fig. 97), is placed here by Dr. Weinkauff, and I agree with him, although Mr. E. A. Smith (Jour. Linn. Soc., xii, 535) makes it a synonym of *C. magus*. *C. anceps* (fig. 98), and *C. innexus*, A. Ad., as well as *C. Daullei*, Crosse (fig. 99), are synonyms. *C. ustulatus*, Reeve (fig. 100), is considered by Mr. E. A. Smith a synonym of *C. magus*, but I think it more closely allied to *C. consors*.

C. FULVOCINCTUS, Crosse. Pl. 15, fig. 1.

Shell with slight revolving grooves, obsolete above; yellowish white, with a broad superior band of orange-brown; epidermis thin. Length, 3 inches.

W. Coast of Africa.

C. CONSANGUINEUS, E. A. Smith. Pl. 15, fig. 2.

Shell smooth, spire and base grooved; yellowish white, banded

Digitized by Google

with yellowish brown in the middle, with one or two interrupted inferior and narrower bands below, apex pink-tinted. Epidermis thick. Length, 3·5 inches.

Habitat unknown.

Closely allied to *C. fulvocinctus*, but not so much attenuated at the base, spire less elevated, epidermis thicker, more banded.

C. MAGUS, Linn. Pl. 15, figs. 3–10; Pl. 16, figs. 11–14.

Spire moderate, striate, body-whorl long and rather cylindrical, closely striate below; white, clouded with bluish ash, orange-brown, chestnut or chocolate, everywhere encircled by narrow chocolate interrupted lines, often separated into somewhat distant dots, middle of body-whorl usually irregularly fasciate with white; spire tessellated with chestnut or chocolate. Length, 2–3 inches.

Madagascar, *Borneo*, *Australia*, *N. Caledonia*, *Philippines*, etc.

This beautiful and common species is very variable in pattern and shade of coloring and embraces a large synonymy. I place here *C. raphanus*, Hwass (fig. 4), *C. consul*, Boivin (fig. 5), *C. Indicus*, *C. Circæ*, *C. fenellus*, and *C. clandestinus*, of Chemnitz, *C. striolatus*, Kiener (fig. 6), *C. Borneensis*, Sowb., not Ad. and Reeve (fig. 7), and *C. assimilis*, A. Ad. (fig. 8).

Var. FRAUENFELDI, Crosse. Pl. 15, fig. 9.

Yellowish or cream-color, with a few irregular longitudinal chestnut or chocolate markings; spire sparsely maculated.

Madagascar.

Var. ROLLANDI, Bernardi. Pl. 16, fig. 11.

Surface covered by equidistant striæ, more prominent at the base; white with irregular longitudinal cloudings of chestnut.

Var. METCALFEI, Reeve. Pl. 15, fig. 10.

Shell encircled with granular striæ, spotted with orange-brown; there are irregular cloudings of orange-brown, and a central white band.

Var. EPISTOMIUM, Reeve. Pl. 16, figs. 12–14.

Shell rather narrow, thin; white, irregularly clouded with orange-brown, forming an irregular central white band; shoulder sharply carinated, spire maculated; base grooved or striate.

Digitized by Google

This variety closely connects *C. magus* with *C. consors*. *C. Tasmaniæ*, Sowb. (fig. 13), is a somewhat more highly colored specimen of this variety, and *C. epistomoides*, Weink. (fig. 14), differs but little.

C. PERTUSUS, Hwass. Pl. 16, figs. 15–17.

Spire convex, rather obtuse, body-whorl encircled by distant punctate striæ; rosy tinged with yellow and interruptedly banded with white blotches below the shoulder and in the middle of the body-whorl. Length, 2 inches.

Madagascar, *Mauritius*, *Philippines*, *Ins. Annaa*, etc.

C. festivus, Chemn. (fig. 16), = *amabilis*, Lam., is synonymous. *C. inquinatus*, Reeve (fig. 17), appears to be merely a darker colored specimen, chocolate-brown instead of roseate.

C. SIMPLEX, Sowb. Pl. 16, fig. 18.

Shell oblong, turbinated, rather thin; white, with longitudinal irregular chestnut streaks. Length, 2 inches.

West and *South Africa*.

The spire is more elevated, the body-whorl more cylindrical, the color-markings more continuous than in *C. spectrum*—yet it may be a variety of that species. *C. informis*, Dillw., is a synonym.

C. rudis, Chemn., is scarcely determinable from the original figures, and neither Sowerby nor Reeve has attempted to identify it. Dr. Weinkauff, however, adopts it as a species, and refers to it, *C. informis*, Dillw., *C. elongatus*, Sowb., Thes. (part), f. 241, and *C. inquinatus*, Reeve—all of which differ utterly in form from the Chemnitzian figures.

C. SINDON, Reeve. Pl. 16, fig. 19.

Shell somewhat ventricosely turbinated, nearly smooth; white, very thickly decussated with exceedingly fine reddish brown lines in such a manner as to form two broad transverse bands; spire rather obtusely convex, apex rose-tinted.

Length, 1·25 inches.

Habitat unknown.

I am not acquainted with this species, of which only a single individual is known; it was described from the cabinet of Mr. Adamson, of Newcastle, England, and Dr. Weinkauff, apparently

Digitized by Google

mistaking that gentleman's name for Adanson, has supplied the locality of West Africa.

C. MISER, Boivin. Pl. 16, fig. 20.

Shell with convex body-whorl and flattened, striate spire; yellowish, without maculations, aperture white, dilated in front.

Length, 27 mill.

Cape Verd Is.

C. MERCATOR, Linn. Pl. 16, figs. 21–23.

Shell yellowish or ash-gray, often faintly longitudinally lined with chestnut, with a broad band at the shoulder and a narrower one at the middle, of white closely reticulated with chestnut.

Length, 1–1·25 inches.

West Indies, West Africa.

Var. DESIDIOSUS, A. Ad. Pl. 16, fig. 23.

Shell chocolate-brown, the bands of reticulations narrower, spire more elevated.

W. Africa.

C. CUNEOLUS, Reeve. Pl. 16, figs. 24, 25.

Shell shortly turbinated, wide at the shoulder, somewhat inflated; chestnut- or chocolate-brown, with small white maculations, forming an obscure band at the shoulder, and another below the middle, as well as somewhat scattered over the rest of the surface, including the convex spire. Length, 1·25 inches.

West Africa.

C. balteus, Mawe, is a synonym.

C. NATALIS, Sowb. Pl. 16, figs. 26, 27.

Shell oblong, thin, smooth, angulated at the shoulder, sulcate below; roseate, minutely angularly lineate with brown, and bifasciate with large maculations, spire maculate.

Length, 1 inch.

Natal.

Weinkauff makes this a variety of *C. mercator*, but it appears to differ considerably in coloration. Sowerby's smaller figure (fig. 27) is supposed to represent a young shell of this species.

C. OLIVACEUS, Kiener. Pl. 16, figs. 28–31.

Shell somewhat top-shaped, with rounded shoulder, sulcate towards the base; obscurely marbled with yellowish olive and

Digitized by Google

white, with several darker olivaceous bands; aperture chocolate with two or more narrow white bands. Length, 1·25 inches.

West Africa.

C. Taslei, Kiener (fig. 29), and *C. luridus*, A. Ad., are synonyms; the latter is unfigured.

Var. IRREGULARIS, Sowb. Pl. 16, figs. 30, 31.

Shell bluish ash, tinged with chestnut at the extremities, with two white lines, one at the shoulder, the other near the middle, overlaid, when perfectly developed, with white zigzag markings.

C. INFRENATUS, Reeve. Pl. 16, figs. 32, 33.

Shell rosy white, encircled by articulated lines of chestnut and white spots; apex pink. Length, 1 inch.

South Africa.

C. ROSACEUS (Chemn.), Auct. Pl. 17, figs. 34–39.

Shell yellow rosy, sometimes indistinctly brown-dotted in revolving lines, middle usually light-banded, the band maculated with chestnut, spire also maculated; surface finely striated throughout. Length, 1·75 inches.

South Africa.

This species is the *C. aurora* of Lamarck, *C. Broderipi*, Kiener, not Reeve, and *C. roseo-tinctus*, Sowb (fig. 36).

Var. TINIANUS, Reeve (not Hwass). Pl. 17, figs. 37, 38.

Shell thin, striated towards the base; reddish chestnut clouded with gray, and irregularly ornamented with indistinct fillets of articulated white and chestnut; spire obtusely convex, apex rose-tinted.

C. Loveni, Krauss (fig. 38), is essentially similar.

Var. SIGNIFER, Crosse. Pl. 17, fig. 39.

Shell finely striated, faintly articulated with chestnut and white in revolving lines upon a brown-violet surface; there are a few white maculations on the spire, and the upper and lower extremities and middle of the body-whorl. Length, 39 mill.

Hab. unknown (Cuming coll.).

C. LAMARCKI, Kiener. Pl. 17, figs. 40–42.

Shell somewhat inflated, smooth, striate at the base; orange-

Digitized by Google

brown, maculated with white, forming two irregular bands, besides scattered spots. Length, 1·6 inches.

South Africa.

Distinguished from the typical *C. rosaceus* by its more bulbous form, partial absence of striæ and the pattern of painting; yet connecting pretty closely with that form through some of its varieties. *C. inflatus* (fig. 41) and *C. citrinus* (fig. 42), both of Kiener, are varieties.

C. BRODERIPII, Reeve. Pl. 17, fig. 43.

Shell rather thin, a little inflated, encircled by grooves more distinct towards the base, and very finely pricked; very pale fleshy white, ornamented between the grooves with blotches of light orange-brown; spire grooved, apex pointed; aperture rosy. Length, 28 mill.

Moluccas.

I am not acquainted with this species.

C. SPECTRUM, Linn. Pl. 17, figs. 44–49, 51.

Shell cylindrically turbinated, thin, somewhat inflated, lower part of body-whorl with distant revolving grooves; white, variously painted with chestnut longitudinal irregular streaks, usually forming three broad series or bands.

Length, 1·5–2 inches.

Mauritius, *Java*, *Moluccas*, etc.

C. pica, Ad. and Reeve (figs. 46, 47), and *C. subulatus*, Sowb., not Kiener (fig. 48), are synonyms. *C. collisus*, Reeve (fig. 45), is a slight variety.

Var. LICTOR, Boivin. Pl. 17, fig. 49.

Whole surface distantly encircled by granular striæ.

Var. LACTEUS, Lam. Pl. 17, fig. 51.

Shell pure white, distantly grooved throughout. More inflated than *C. parius*, Reeve, which it otherwise closely resembles.

C. DOLIUM, Boivin. Pl. 17, fig. 50.

Shell more inflated than *C. spectrum;* irregularly clouded with yellowish brown and white. Length, 36 mill.

Hab. unknown.

C. ANDAMANENSIS, E. A. Smith. Pl. 17, fig. 52.

Yellowish white, irregularly marked with small brown spots

Digitized by Google

and lines, covered by a thin, smooth epidermis; base grooved; spire striate, with radiating brown lines; aperture white.

Length, 22–31 mill.

Andaman Islands.

C. CONSPERSUS, Reeve. Pl. 17, figs. 53, 54; Pl. 18, figs. 55, 56; Pl. 27, fig. 7.

Shell turbinated, slightly inflated, smooth, grooved towards the base; pale yellowish or salmon-color, sprinkled with irregular orange-brown spots and longitudinal blotches, sometimes with two obsolete lighter bands; everywhere encircled with very fine, close hair-like lines; spire convex, tessellated with orange-brown; aperture flesh-color. Length, 1·25–1·9 inches.

Moluccas.

This species is scarcely distinguishable from *C. spectrum*. *C. Verreauxii*, Kiener (fig. 54), *C. stillatus*, Reeve (fig. 55), and possibly *C. inflatus*, Sowb. (Pl. 27, fig. 7), are synonyms. The latter does not much resemble this species, and remains unidentified, but Sowerby has himself suggested its place here.

Var. DAPHNE, Boivin. Pl. 18, fig. 56.

Shell orange-color or orange-brown, including the aperture, without markings, except variations of shading.

C. CINEREUS, Hwass. Pl. 18, figs. 57–61.

Cylindrically ovate, with moderate, smooth spire, body-whorl encircled below by distant grooves; clouded with olivaceous, ashy blue and chestnut-brown, with revolving lines articulated of chestnut and white spots; aperture brown-stained.

Length, 1·75 inches.

Philippines, Australia.

C. zebra, Lam. (not of Reeve or Sowb.), and *C. Gabrieli*, Kiener (fig. 58), are synonyms.

Var. STRATURATUS, Sowb. Pl. 18, fig. 59.

With interrupted longitudinal chestnut markings forming bands upon an ash-blue ground.

Borneo.

Var. BERNARDII, Kiener. Pl. 18, fig. 60.

Fulvous chestnut, with a few scattered white spots and chestnut revolving lines.

Digitized by Google

Var. POLITUS, Weinkauff. Pl. 18, fig. 61.

Yellowish brown, with revolving lines of chestnut and white articulations, and three distant, narrow white bands marked with chestnut. Length, 39 mill.

Habitat unknown.

C. TRIBUNUS, Crosse. Pl. 20, fig. 20.

Shell smooth, grooved below; orange-brown, indistinctly light-banded in the middle, longitudinally strigate with chocolate; aperture light viblaceous. Length, 30 mill.

Coast of California (Crosse).

The locality given for this species needs confirmation.

C. ALBOSPIRA, E. A. Smith. Pl. 18, fig. 62.

Spire concavely elevated, lirate, white, with flesh-colored apex; body-whorl angulate above, striate, the striæ becoming stronger and subgranular below; white with longitudinal olive stripes forming three bands by their somewhat regular interruption; aperture lilac-white. Length, 27·5 mill.

Habitat unknown.

Mr. Smith compares this to *C. straturatus*, Sowb. (*cinereus*, Hwass , but I think it is more nearly related to *C. rosaceus*, Chemn., and that it may prove to be a very light-colored variety of that species.

C. NISUS (Chemn.), Auct. Pl. 18, figs. 63–68.

Shell somewhat swollen, distantly sulcate below, otherwise smooth; white, encircled by chestnut spots, clouds, and oblique and triangular markings; spire maculated.

Length, 1–1·5 inches.

Philippines, Moluccas.

With this species may be united *C. zebra*, Sowb. (fig. 65), *C. Blanfordianus*, Crosse (fig. 66), *C. alveolus*, Sowb. (fig. 64), *C. stigmaticus*, A. Ad. (fig. 67), *C. stramineus*, Lam., and *C. cocceus*, Kiener (fig. 68).

C. SUBMARGINATUS, Sowb. Pl. 18, figs. 69, 70.

Shell narrow, with raised carinate spire, body-whorl attenuate and closely sulcate in front; yellowish white, aperture rosy.

Length, ·85 inch.

Habitat unknown.

Digitized by Google

An obscure species. *C. suturatus*, Kiener, not Reeve (fig. 70), appears to be identical.

C. RADIATUS, Gmelin. Pl. 18, figs. 71–73.

Shell pale yellowish to pale chestnut, often longitudinally indistinctly marked with deeper coloring; spire striate, lower part of body-whorl distantly sulcate. Length, 1·5–2·25 inches.

Philippines, Polynesia.

Reeve described and figured this species under the name of *C. Martinianus;* he has also called a smaller white variety *C. parius* (fig. 72); the specimens before me prove its specific identity with *radiatus*. The white variety is frequently covered by a smooth olivaceous epidermis; in which state it is *C. Gubbæ*, Kiener (fig. 73).

C. CONTUSUS, Reeve. Pl. 18, fig. 74.

Shell somewhat cylindrically ovate, rather thin, smooth, with three or four distant grooves at the base, spire finely double-grooved, rude at the sutures, apex very sharp; ochraceous, stained with ash-blue. Length, 1·25 inches.

Moluccas.

Whether this species will be found to reveal any design in the coloring, it is impossible to foresee from the single worn specimen.

C. OCHROLEUCUS, Gmelin. Pl. 18, fig. 75.

Shell long and narrow, distantly grooved towards the base; yellowish brown, variously shaded, with a rather indistinct median lighter band; aperture white; spire striate, maculated with yellowish brown and white. Length, 2–2·5 inches.

Australia, New Caledonia, Viti Islands.

C. IODOSTOMA, Reeve. Pl. 18, fig. 76.

Shell thin, narrow, somewhat inflated; spire finely grooved, apex sharp; body-whorl striate towards the base; violet-white, clouded with chestnut, with revolving lines of chestnut spots. Length, 40 mill.

Philippines.

C. LIENARDI, Crosse and Bernardi. Pl. 18, fig. 77; Pl. 19, figs. 78, 79.

Spire raised, carinated, slightly striate; body-whorl distantly

Digitized by Google

grooved below; yellowish brown, variously longitudinally covered with zigzag chestnut or chocolate markings; sometimes almost or quite covered with chocolate. Length, 1·75 inches.

New Caledonia.

Distinguished by its sharp shoulder and coloration.

C. MACEI, Crosse. Pl. 19, fig. 80.

Shell rather thin, smooth under a thin epidermis; whitish, with chestnut longitudinal flames; base of body-whorl finely sulcate; aperture pale violaceous. Length, 38 mill.

Vizagapatam (Madras), India.

C. TIMORENSIS, Hwass. Pl. 19, fig. 81.

Shell smooth, striate towards the base; rosy white, with orange-rose clouds and distant revolving series of spots.

Length, 1·5 inches.

Timor, Flores, etc.

C. JANUS, Hwass. Pl. 19, fig. 82.

Spire concavely elevated, striate; body-whorl narrow, with rounded shoulder, and distantly sulcate below; whitish or yellowish, indistinctly three-banded by yellowish brown or chestnut longitudinal markings; spire maculated.

Length, 2–2·5 inches.

Cochin China, Philippines.

C. JICKELII, Weinkauff. Pl. 19, fig. 83.

Shell white, with chocolate, irregular, longitudinal markings, and quadrangular spots in revolving series. Length, 2 inches.

Red Sea.

Very closely allied to the preceding species, of which it may be only a variety.

C. INSCRIPTUS, Reeve. Pl. 19, figs. 84, 85.

Shell rather solid, smooth, grooved towards the base; ash-white, with dark chestnut hieroglyphic characters, interrupted by revolving series of spots in the middle and at the base.

Length, 1·4 inches.

Red Sea, Seychelles.

C. Keatii, Sowb. (fig. 85), varies slightly in the disposition of the color-markings. The species has a sharper shoulder than *C. Janus*, but is too closely allied to that species.

Digitized by Google

C. ERYTHRÆENSIS, Beck. Pl. 19, figs. 86–89.

Shell small, smooth, striate below; yellowish white, with revolving rows of quadrangular chestnut spots, sometimes partly clouded over, so as to form bands of chestnut clouds; spire maculate. Length, ·8–1·2 inches.

Red Sea.

C. induratus, Reeve (fig. 86), a young shell, *C. piperatus*, Reeve (fig. 87), *C. quadrato-maculatus*, Sowb. (fig. 88), and *C. concinnus*, Sowb., Jr. (fig. 89), not Sowb., Sen. or Brod., = *C. sapphirostoma*, Weinkauff, are all synonyms; besides several unfigured and less known species.

C. PUNCTICULATUS, Hwass. Pl. 19, figs. 90–96.

Shell rather broad-shouldered and somewhat swollen above, slightly contracted and grooved towards the base; whitish, encircled by numerous lines of close, small chestnut spots, and often clouded longitudinally with light violaceous or chestnut, forming three obscure bands; aperture white or violaceous.

Length, 1–1·25 inches.

West Columbia, northwards to *Cerros Isl.*, *L. California*, *West Indies.*

A wider shell, with smaller, much more numerous spots than *C. Erythræensis*. *C. perplexus*, Sowb. (fig. 91), *C. pustulatus*, Kiener (fig. 92), and *C. papillosus*, Kiener (fig. 93), are synonyms; the latter two are pustulate on the revolving lines.

The West Indian *C. pygmæus*, Reeve, = *C. pusio*, Sowb. (fig. 94), = *C. Duvali*, Bern (fig. 95), presents no distinctive features. *C. Hanleyi*, Sowb. (fig. 96), said to inhabit the Mediterranean Sea (?), is very similar.

C. COLUMBA, Hwass. Pl. 19, figs. 97, 98.

Shell white, under a very thin light brown epidermis; shoulder angulated; body-whorl deeply distantly grooved towards the base; sometimes there are a few longitudinal brown markings above the grooves. Length, ·75–·9 inch.

West Indies.

C. ANGASI, Tryon. Pl. 19, fig. 99.

Shell rosy or yellowish white, ornamented with rows of small distant square or elongated irregular brownish yellow spots, those in the centre larger and more varied in shape, forming a sort of

Digitized by Google

band; sculptured all over with rows of minute, close-set, oblong punctures, more numerous and distinct towards the base, which is encircled by a number of narrow elevated ridges; spire striate.

Length, 20 mill.

Port Jackson, Australia.

Described by Angas as *C. Metcalfei*, a name preoccupied by Reeve.

C. INTERRUPTUS, Brod. Pl. 27, fig. 8; Pl. 19, figs. 100–2; Pl. 20, figs. 3–5, 21.

Shell long and narrow, with smooth elevated spire, body-whorl striate towards the base, the striæ sometimes minutely granular; whitish, largely covered by longitudinal chocolate clouds, encircled by numerous lines of minute chestnut spots; spire nearly covered by chestnut or chocolate flammules.

Length, 1·5–2·25 inches.

West Coast of Central America to *Mazatlan*, *Cape St. Lucas.*

Occasionally the entire body-whorl is covered with impressed or raised striæ, the latter smooth or granular. There are a number of synonyms, none of them differing much from the typical shells. These are *C. mahogani*, Reeve (figs. 1, 2), *C. Ximenes*, Gray (fig. 100), *C. monilifer*, Brod. (fig. 3), *C. tornatus*, Brod (fig. 4), *C. Philippii*, Kiener (fig. 5).

C. arcuatus, Brod. and Sowb., although differing much in form, is still possibly an extreme variety of this species; and I am inclined to refer here also *C. catenatus*, Sowb. (fig. 21).

Section XII. ACHATINI.

Chelyconus, Mörch.

C. CATUS, Hwass. Pl. 20, figs. 6–10.

Shell bulbous, with convex, striate spire; body-whorl striate, the striæ rounded, usually obsolete above, granular below, olive, chestnut-, chocolate- or pink-brown, variously marbled and flecked with white, often faintly white-banded below the middle.

Length, 1·25–1·75 inches.

Red Sea, Mauritius, Java, China, New Caledonia, Polynesia.

C. eques, Brug. (fig. 10), is probably a synonym; the species is only known by the figure of which I give a copy.

Digitized by Google

Var. NIGROPUNCTATUS, Sowb. Pl. 20, figs. 8, 9.

Shell colored as above and encircled by series of chocolate-colored dots. *C. Adansoni*, Reeve (fig. 9), is synonymous.

C. ACHATINUS (Chemn.), Auct. Pl. 20, figs. 11, 12.

Shell bulbous, with somewhat elevated, striate spire; body-whorl with rounded, sometimes granular striæ below; marbled with pinkish or purplish white and olivaceous-brown, under a light brown, thin epidermis, everywhere encircled by close-set narrow brown lines, which are usually broken up into brown and white articulations. Length, 2–3 inches.

India, China, Australia, Solomon's Islands.

C. SUPERSTRIATUS, Sowb. Pl. 20, fig. 13.

Shell oblong, fuscous, obscurely nebulous, sulcate above and below, smooth in the middle, with a median white band, maculated with fuscous; spire depressed, striated, maculated. Length, 1 inch.

Habitat unknown.

An obscure species, only known through Sowerby's figure and short description.

C. MONACHUS, Linn. Pl. 20, fig. 14.

Shell a little inflated, distantly grooved below; spire striate, somewhat convex; white, longitudinally marbled and flecked with dull blue or purple. Length, 2 inches.

Philippines, New Caledonia.

Narrower at the shoulder, thinner, usually without the dotted revolving lines of *C. achatinus*, although a few such lines are sometimes vaguely apparent.

Weinkauff considers *C. assimilis*, A. Ad., a synonym of this species. I have referred it to *C. magus*.

C. PURPURASCENS, Brod. Pl. 20, figs. 15–17; Pl. 27, fig. 9.

Shell broad-shouldered, with rude, striate spire; striate below, and the striæ sometimes slightly granular; clouded with white or violaceous and brown or olive, with close lines of chestnut and white minute articulations; sometimes irregularly white-banded in the middle. Length, 2–3 inches.

Panama to *Mazatlan*.

Weinkauff makes *C. neglectus*, A. Ad. (fig. 16), the juvenile of

Digitized by Google

8638
May 28. 1884

MANUAL

OF

CONCHOLOGY;

STRUCTURAL AND SYSTEMATIC.

WITH ILLUSTRATIONS OF THE SPECIES.

BY GEORGE W. TRYON, JR.

CONSERVATOR OF THE CONCHOLOGICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

VOL. II.

Part 2

PHILADELPHIA:

Published by the Author,

ACADEMY OF NATURAL SCIENCES, COR. 19TH & RACE STS.

Digitized by Google

ADVERTISEMENT.

I propose to compile a Conchological Manual, which, whilst more comprehensive than any similar work hitherto published, shall be so condensed in text and illustration that it may be issued at a much more moderate price. It will include, in systematic order, the diagnoses of all the genera and higher divisions of the mollusca, both recent and fossil, and the descriptions and figures of all the recent species; together with the main features of their anatomy and physiology, their embryology and development, their relations to man and other animals, and their geological and geographical distribution.

The material at my disposal for the purpose of working up this comprehensive plan is ample and unexcelled:

I.—The Library of the Academy of Natural Sciences of Philadelphia contains almost every separate work ever published upon the subject, together with the various volumes of voyages and travels, of general natural history, and especially scientific periodicals, and the published transactions of learned societies throughout the world. For Conchological purposes this library is almost complete, and it is very rarely that its shelves do not afford any reference desired.

II.—The Conchological Museum of the same institution ranks among the largest in the world in the number of species represented, whilst in the richness of its geographical suites, the number of specimens illustrating varietal forms, etc., it is probably the finest collection extant.

It is intended to arrange and describe the valid species in accordance with their inter relationships, and it is hoped that by so doing their number may be greatly reduced. Every genus and every recent species will be fully illustrated, so far as specimens or hitherto published figures will enable me to do so. The experienced skill of the artists who have undertaken to furnish the illustrations (of which 30,000 to 40,000 will be required), will sufficiently guarantee the accuracy of this department of the Manual.

In the preparation of the text every care will be taken to discover and correct, and to avoid, error; but it may be reasonably apprehended that the performance of such an immense work must be in many respects inferior to

Digitized by Google

this species. *C. Luzonicus*, Sowb., not Hwass (fig. 16 *a*), and *C. comptus*, Gould (Pl. 27, fig. 9), are synonyms.

Var. REGALITATIS, Sowb. Pl. 20, fig. 17.

Shell more completely covered with dark color, so as to obscure the articulated lines; but little of the lighter markings is visible beyond an interrupted central band.

C. TESTUDINARIUS (Mart.), Auct. Pl. 20, fig. 18.

Whitish, more or less stained with blue or purple, and clouded with chocolate, irregularly white-banded in the middle; spire and base striate. Length 2·5–3·5 inches.

West Indies, Cape Verd Is., West Coast of Africa.

Allied to *C. purpurascens*, but not so broadly shouldered, with higher spire. *C. aspersus*, Sowb., and *C. Portoricanus*, Hwass, are synonyms.

C. FULMEN, Reeve. Pl. 20, fig. 19.

Shell somewhat elongately ovate, smooth, slightly grooved towards the base; pale rose-purple, white round the middle; longitudinally marked with two or three very prominent, broad, waved, purple-brown streaks; spire obtusely convex, variegated with purple-brown, apex rose-tinted. Length, 2–3 inches.

China, Japan, Philippines.

Narrower, with higher spire, than the allied species. *C. modestus*, Sowb., is supposed by Sowerby (Thes. Conch., Index) to be a young shell of this species.

C. HYÆNA, Hwass. Pl. 20, fig. 22.

Shell turbinate, rather angulate at the shoulder; spire and base striate; pinkish or violaceous white, with broad, chestnut, longitudinal flames. Length, 1·75 inches. *West Africa.*

C. GUINAICUS, Hwass. Pl. 20, figs. 23, 24.

Shell inflated, rather thin, spire and lower portion of body-whorl striate; chestnut or olivaceous, with usually two bands of irregular white cloudings, and scattered white spots; aperture chocolate-color, faintly white-banded in the middle.

Length, 2 inches.

West Coast of Africa.

It is a more bulbous species, with shorter spire, than *C. Medi-*

Digitized by Google

terraneus, but very close in coloring, and may be only a rather distant variety of that species.

C. MEDITERRANEUS, Hwass. Pl. 20, fig. 26; Pl. 21, figs. 25–31.

Shell yellowish brown, pink-brown or olivaceous; sometimes chocolate-brown, very closely nebulously spotted and reticulated; and sometimes interrupted-lined with chestnut, with a narrow, light band below the middle; spire elevated, rudely gradate, maculated; interior light chocolate, with a light band.

Length, 1·5–2·25 inches.

Mediterranean, Portugal, West Africa.

C. hybridus, Kiener, *C. Franciscanus*, Hwass (fig. 26), a dark-colored variety, and numerous other names have been applied to varieties of this species, recent and fossil.

Var. ADANSONI, Lam. Pl. 21, fig. 27–29.

Shell more cylindrical.

West Africa.

C. Jamaicensis, Sowb. (fig. 28), and *C. Bruguieri*, Kiener (fig. 27), are synonyms. *C. Tamsianus*, Dunker (fig. 29), appears to be a younger shell.

Var. CŒRULESCENS (Chemn.), Auct. Pl. 21, figs. 30, 31.

Shell more conical, with broader shoulder and shorter spire.

West Africa.

C. æmulus, Reeve (fig. 31), is a synonym.

C. ALTISPIRATUS, Sowb. Pl. 21, fig. 32.

Shell fusiform, with much elevated spire, and narrow body-whorl, sulcate below; white, apex pink-tinted.

Length, 1·5 inches.

Agulhas Bank, So. Africa.

C. CASTUS, Reeve. Pl. 21, fig. 33.

Shell turbinated, a little inflated, smooth; yellow, encircled by a few faint, very finely black-dotted lines, at irregular distances; spire smooth, apex rose-tinted. Length, ·75 inch.

Red Sea (Sowerby).

A doubtful species.

C. MADURENSIS, Hwass. Pl. 21, fig. 34.

Shell yellowish or chestnut-brown, with an irregular light band

Digitized by Google

on the middle, and another above it, which are bordered with chestnut markings; spire maculated. Length, ·9 inch.

Java.

C. BORBONICUS, H. Adams. Pl. 21, fig. 35.

Shell narrow, smooth, with elevated spire, slightly nodulous; body-whorl striated below; yellowish rose, with a central white band and numerous interrupted chestnut lines. Length, 12 mill.

Isle of Bourbon.

Undoubtedly an immature shell.

C. CORALLINUS, Kiener. Pl. 21, figs. 36, 37.

Shell narrow, with elevated spire; yellowish, with a central white band bordered with chestnut spots, spire maculated with chestnut. Length, 1 inch. *Habitat unknown.*

C. inæqualis, Reeve (fig. 37), has a somewhat wider shoulder, but is otherwise so closely allied that I think Dr. Weinkauff is right in considering it a variety only.

C. DILECTUS, Gould. Pl. 21, fig. 38.

Shell acutely conical; spire concavely elevated, carinated and striated; color dingy white, everywhere covered with minute reticulations of pale rusty lines, with a series behind the middle and another at the anterior third of the last whorl, of several large lunate or triangular white spots, alternating with dark ferruginous spots; and there is the same alternation on the shoulder of the last whorl; around its anterior portion are six or eight grooves; interior flesh-colored. Length, 12 mill.

Fiji Islands.

C. NITIDUS, Reeve. Pl. 21, fig. 39.

Yellowish, apex pink, body-whorl with an irregular central white band, and narrow chestnut lines, often broken up into spots. Length, ·75 inch. *Philippines.*

C. APLUSTRE, Reeve. Pl. 21, figs. 40, 41.

Shell rather stoutly turbinated, smooth, thin, somewhat inflated, striate towards the base; yellowish white, with irregular yellowish brown or ash faint bands, and lines of white and chestnut articulations; spire depressed, apex pointed.

Length, 1·25–1·4 inches.

Cape Good Hope (Sowerby), *Australia* (Brazier), *New Zealand* (Hutton).

Digitized by Google

C. Zealandicus, Hutton, and *C. multicatenatus*, Sowb. (fig. 41), are synonyms—the latter more richly colored than typical examples.

C. PICTUS, Reeve. Pl. 21, figs. 42–44.

Chestnut-colored, with two or three pink bands, and a few narrow lines, ornamented with reddish or chestnut spots; spire maculated. Length, ·75–1·4 inches.

South and *East Africa.*

C. jaspideus, Kiener, not Gmelin = *C. Danieli*, Crosse (fig. 43), and *C. scitulus*, Reeve (fig. 44), are synonyms.

C. PAUPERCULUS, Sowb. Pl. 21, fig. 45.

Shell narrow, thin, olivaceous, with a flesh-colored central band, and numerous revolving series of small chestnut spots.

Length, 1 inch.

South Africa; Japan (Dunker).

C. LAUTUS, Reeve. Pl. 21, fig. 46.

Shell yellowish, the spire, a central band, and base marked longitudinally with chestnut, rest of body-whorl with revolving lines of chestnut spots. Length, 1·5 inches.

Cape of Good Hope.

May be a variety of the preceding species.

C. ELONGATUS (Chemn.), Auct. Pl. 21, fig. 47.

Shell yellowish brown, longitudinally streaked with chestnut or chocolate, light-banded in the middle, and occasionally with several lines of chocolate spots; spire maculated.

Length, 2 inches.

South Africa, Mozambique.

C. Mozambicensis, Hwass, is a synonym.

C. CAFFER, Krauss. Pl. 21, figs. 48–51.

Shell narrow, with convex spire, rosy or dark brown, with a light central band, the lighter-colored varieties with revolving lines of brown spots. Length, 1–1·5 inches.

Cape of Good Hope.

Much resembles *C. pictus*, Reeve, and may be a variety of that species, but is narrower, with more convex spire; the lighter-colored shells are painted very like *C. pictus*. *C. gilvus*, Reeve (fig. 50), and probably *C. secutor*, Crosse (fig. 51), are synonyms.

Digitized by Google

C. ROSSITERI, Brazier.

Shell turbinated, thin, shining, transversely finely striated under the lens, longitudinally blotched with chestnut-brown, white and light blue; spire slightly convex, apex pointed; whorls seven to eight, upper edge of basal whorl splashed with white arrow-shaped spots, alternating with dark square chestnut spots; very finely striated between the sutures, a dark interrupted chestnut band across the centre of the shell, below the band faint whitish spots; base ridged, tipped with white, with a dark red band above the white; lip thin, slightly flexuous, edged with brown; interior of aperture white and brown. Length, ·66 inch.

Botany Bay, N. S. Wales.

The above is the full description of this unfigured species; it is probably an immature shell. I have not seen it.

C. ALGOENSIS, Sowb. Pl. 22, fig. 52.

Shell thin, smooth, chestnut-brown, with one or two bands of longitudinal white markings; spire articulated with white and brown. Length, 1 inch.

Algoa Bay, So. Africa.

C. FUCATUS, Reeve. Pl. 22, fig. 53.

Shell conically turbinated, smooth or obsoletely peculiarly indented, ridged at the base; spire conspicuously striately grooved, intermediate ridges granulated, apex raised, sharp; ash-olive, spire marbled with white. Length, ·8 inch.

Philippines.

C. LACHRYMOSUS, Reeve. Pl. 22, fig. 54.

Oblong-conical, slightly ventricose, rather thin, smooth, contracted and ridged towards the base; spire striately grooved, sharp at the apex; fulvous orange, encircled by interrupted lines of darker color, white in the middle and on the upper edge, painted longitudinally with promiscuously waved orange-brown streaks, spire stained and variegated with the same color.

Length, 1·25 inches.

Habitat unknown.

A doubtful species, described from the Cumingian collection.

C. ANEMONE, Lamarck. Pl. 22, figs. 55–61.

Shell very variable in form, short and robust, with short spire, or longer and more slender, with elevated spire; spire and body-

Digitized by Google

whorl closely encircled throughout with close ridged striæ; white, longitudinally nebulously or reticulately painted with chestnut or chocolate, with an irregular central white band; aperture chocolate-tinged and white-banded in the middle.

Length, 1·25–2·25 inches.

Borneo, Philippines, Australia, New Caledonia.

The peculiar ridged striæ form the most constant character of this species. The synonyms are rather numerous, as the form is very inconstant; they include *C. maculatus*, Sowb. (fig. 56), a short, broad shell, possibly *C. ardisiacus*, Kiener, *C. Novæ-Hollandiæ*, A. Ad. (fig. 57), *C. Jukesii*, Reeve (fig. 58), another short-spired and broad-shouldered form, *C. Cabriti*, Bernardi (fig. 59), and *C. compressus*, Sowb. (fig. 60), an immature shell.

C. anemone is related to *C. rosaceus*, Chemn., in its striæ and the usual form of the spire and body-whorl, and it is possible that they are specifically identical, although differing in the pattern of coloring.

C. COCCEUS, Reeve. Pl. 22, figs. 62, 63.

Shell turbinated, rather stout towards the upper part, a little rounded, transversely very finely ridged, interstices between the ridges slightly pricked; white delicately filleted with small irregular pale scarlet spots; spire obtusely convex.

Length, 1·2–1·5 inches.

Australia, Philippines.

C. decrepitus, Kiener (fig. 63), appears to be a color-variety, as determined by Reeve, Sowerby and Weinkauff.

C. CERINUS, Reeve. Pl. 22, fig. 64.

Shell somewhat stoutly ovate, rather thick, smooth, base peculiarly granosely ridged, spire three-grooved; white, conspicuously painted with interrupted lineated chestnut blotches, apex pink.

Length, 1·15 inches.

Philippines.

C. VAYSSETIANUS, Crosse. Pl. 22, fig. 65.

Shell finely coronated; body-whorl closely striated, chestnut-brown, with white maculations at the middle and (less distinctly) on the shoulder; aperture chestnut within. Length, 14 mill.

New Caledonia.

Digitized by Google

C. CARNALIS, Sowb. Pl. 22, fig. 66,

Shell obsoletely striate, slightly ridged towards the base; light pink, with two broad yellowish brown bands; spire also tinged with yellowish brown. Length, 50 mill.

Habitat unknown.

C. MELVILLI, Sowb. Pl. 22, fig. 67.

Shell abbreviately subcylindrical, solid, obtusely angulated, smooth, crenate-sulcate in front; grayish white, with cinnamon-brown longitudinal clouds, and undulating revolving lines, the interstices with some curved longitudinal lines; spire obtuse, strigate with brown; aperture brown-tinted. Length, 20 mill.

Key West, Florida (J. C. Melvill).

I am not acquainted with this species, of which a single specimen was obtained at the above locality.

SECTION XIII. ASPERI.

Cylindrella pars, *Hermes* pars.

C. KIENERI, Reeve. Pl. 22, figs. 68, 69.

Shell somewhat fusiformly turbinated, slightly recurved at the base, transversely grooved throughout, grooves rather distant, pricked; spire striately grooved; livid ash-color, variegated in a banded, interrupted style with chestnut, sprinkled towards the base with opaque white flakes, spire conspicuously spotted with chestnut, interior of the aperture livid purple.

Length, 1·15 inches.

Madagascar (Weinkauff).

The synonyms are *C. nisus*, Kiener, *C. roseus*, Kiener, and *C. latifasciatus*, Sowb. (fig. 69).

C. SUBULATUS, Kiener. Pl. 22, fig. 70.

Shell narrow, with concavely elevated spire, carinated at the sutures; body-whorl regularly distantly grooved throughout; white, often with longitudinal chestnut strigations, interrupted so as to form three broad bands. Length, 1·25–1·75 inches.

Philippines.

C. PRETIOSUS, G. and H. Nevill.

Resembles *C. subulatus*, from which it can be distinguished by its more pyriform, elegantly produced shape, by its being nearly

Digitized by Google

perfectly smooth (on the under side only, on two-thirds of the last whorl, are unusually distant, impressed grooves to be traced, and even these are almost obsolete); white, throughout closely dashed with wavy, brown, slightly pinkish splashes; these markings are somewhat larger and more distinct on the spire, and also form two irregular bands on the body-whorl; apex very sharp, spire much produced, composed of fourteen whorls, acutely angled in the middle, above this angle spirally striated, striæ numerous, near the apex very slightly granular; interior of the aperture a beautiful pink, white near the margin; epidermis thin, smoothish, compact. L. 60, diam. 25, L. apert. 48 mill.

Andaman Isles.

The above is a copy of the original description of this unfigured species, from the single specimen.

C. NEPTUNUS, Reeve. Pl. 22, fig. 71.

Shell narrow, with concavely elevated spire and sharp apex, body-whorl distantly grooved towards the base; flesh-color, everywhere veined and clouded with reddish chestnut flexuous lines and spots; aperture rosy white. Length, 1·75 inches.

Philippines.

C. NEPTUNOIDES, E. A. Smith. Pl. 22, fig. 72.

Shell somewhat wider at the shoulder and spire less striate than in *C. Neptunus;* yellowish white, with irregular chestnut lines or large reticulations, forming two ill-defined broad bands; aperture rosy white. Length, 45 mill.

Australia.

The pattern of coloring is more open and less completely covers the shell, the markings are narrower and better defined than in *C. Neptunus.*

C. MUCRONATUS, Reeve. Pl. 22, figs. 73, 74; Pl. 23, fig. 75.

Shell acuminately turbinated, attenuated towards the base, with revolving grooves throughout, grooves crossed by revolving striæ; whitish, somewhat clouded with pale brown, spire spotted with brown. Length, 1–1·25 inches.

Philippines.

The spire is sometimes obsoletely coronated. *C. alabaster*, Ads. and Reeve (fig. 74), is a synonym. Reeve figures it and refers to the Moll. Voy. Samarang, but it is not described in that

Digitized by Google

work, as it was probably ascertained to be a synonym in time to prevent publication. I place here also:

Var. ORBITATUS, Reeve. Pl. 23, fig. 75.

Ridges flat, the grooves between them pricked and striated; whitish, variegated with burnt brown; spire acuminated, apex raised and sharp.

C. PLANILIRATUS, Sowb. Pl. 23, fig. 76.

Spire maculated with chestnut, spirally striate, minutely cancellate; body-whorl distantly grooved, yellowish white, maculated with chestnut spots, forming obscure bands. Length, 22 mill.

Habitat unknown.

C. AUSTRALIS (Chemn.), Auct. Pl. 23, figs. 77, 78.

Shell distantly channeled throughout, the interstices usually plane, sometimes minutely granular; channels narrow, longitudinally striated; spire much elevated, acuminated, striate, sometimes obscurely minutely coronated; yellowish brown, with light chestnut longitudinal short irregular lines, and clouds of the same color forming three obscure interrupted bands.

Length, 2–3·5 inches.

Australia, Moluccas.

C. laterculus, Sowb. (fig. 78), is a young shell of this species.

C. STRIGATUS, Hwass. Pl. 23, fig. 79.

Shell elongately turbinated, somewhat cylindrical, whitish, encircled throughout with a number of interrupted, close-set, cinnamon-brown stripes, and palely variegated with oblong blotches of the same color; spire convexly raised.

Length, 1·25 inches.

Habitat unknown.

A doubtful species, and possibly not the one intended by the original description.

C. SULCATUS, Hwass. Pl. 23, figs. 79 *a*–81.

Shell with revolving grooves crossed by longitudinal striæ, the intermediate ridges flat or rounded, smooth; spire short, carinated, striate, sometimes with distant compressed tubercles; light yellowish brown, or whitish. Length, 2–2·5 inches.

China, Singapore.

Digitized by Google

Var. UNDULATUS, Sowb. Pl. 23, fig. 80.

Middle and lower part of body-whorl distantly, narrowly grooved, upper part smooth; spire with compressed tubercles.

Var. BOCKI, Sowb. Pl. 23, fig. 81.

Angle of body-whorl more rounded than in the type, with the tubercles larger and better defined; upper part of body-whorl nearly smooth, lower half slightly granularly costate.

Amboina.

C. GRANIFER, Reeve. Pl. 23, figs. 82, 83.

Shell somewhat fusiform, conical, granose throughout, ridged at the base, spire slightly channeled, finely coronated at the edge; white, tinged with light brown at the base and apex.

Length, 1 inch.

Philippines.

C. EXARATUS, Reeve. Pl. 23, fig. 84.

Shell narrow, grooved throughout; grooves regular, rather broad, interstices very finely cancellated with striæ; pale bluish purple, ornamented with a very few small, scattered, rusty, white clouded spots; spire acuminated. Length, ·8 inch.

Habitat unknown.

Dr. Weinkauff suggests that this is an uncoronated variety of the preceding species.

C. PULCHER, A. Ad. Pl. 23, fig. 85.

Shell sulcate throughout; brown, obscurely light-banded in the middle, encircled by lines of brown and white articulations; spire coronated. Length, ·9 inch.

New Caledonia.

Possibly a young variety of *C. sulcatus*, Hwass.

C. SULCIFERUS, A. Adams. Pl. 23, fig. 86.

Shell oblong, distantly sulcate, the interspaces flat; uniform dark brown; spire minutely beaded. Length, ·9 inch.

New Ireland, New Caledonia.

Perhaps a young *C. sulcatus*, Hwass.

C. CANCELLATUS, Lam. Pl. 23, figs. 87–89.

Shell pear-shaped, broad and angulated at the shoulder, contracted towards the base; body-whorl closely sulcate throughout, the sulci striate, intervening ridges rounded; spire carinate,

Digitized by Google

concavely elevated, with acute apex, striate; whitish, obscurely doubly banded with clouds of light chestnut, and spire maculated with the same. Length, 1·4 inches.

China, Philippines, Australia, Tahiti?

C. præcellens, A. Ad. (fig. 88), is a not fully mature specimen, and *C. turriculatus*, Sowb. (fig. 89), is still younger.

C. ACULEIFORMIS, Reeve. Pl. 23, figs. 90–94.

Narrow, with elevated spire; encircled with equidistant punctate grooves, and flat interspaces; white, with light chestnut spots and two interrupted broad bands of chestnut cloudings.

Length, 1–1·5 inches.

Australia, Philippines, China.

C. vimineus, Reeve (fig. 91), *C. insculptus*, Kiener (fig. 93), *C. longurionis*, Kiener (fig. 94), and *C. gracilis*, Sowb. (fig. 92), appear to be very nearly identical; they can scarcely be classed as varieties.

C. D'OBBIGNYI, Audouin. Pl. 23, figs. 95, 96.

Spire elevated, closely striated, coronated; body-whorl contracted below, encircled with punctured channels; yellowish white, clouded and spotted with light chestnut, and forming three interrupted bands. Length, 1·5–2·25 inches.

China, Japan, Philippines.

The synonymy includes *C. planicostatus*, Sowb., and *C. gemmulatus*, Sowb. (fig. 96), the latter a young shell.

C. ARMIGER, Crosse. Pl. 24, fig. 97.

Spire elevated, with compressed tubercles at the sutures; body-whorl encircled by tuberculated striæ; yellowish white.

Length, 1·25 inches.

Habitat unknown.

Has much the appearance of the foregoing species. It is supposed to be a fossil. First described by Kiener as *C. crenulatus*, a name preoccupied by Deshayes, and therefore altered as above by Mr. H. Crosse.

C. ARCUATUS, Brod. and Sowb. Pl. 24, fig. 98.

Shell broadly and angularly shouldered, spire concavely elevated, apex acute, body-whorl somewhat contracted below, with revolving striæ, sometimes obsolete above; white, marbled or

Digitized by Google

streaked with chestnut, the coloring usually interrupted by the revolving sculpture so as form revolving series of spots.

Length, 1·25–1·75 inches.

Mazatlan, West Coast of Mexico.

Very probably *C. scalaris*, Val. (Pl. 27, fig. 10), is an overgrown specimen of this species, with the spire gradate, and abnormally produced.

C. UNDATUS, Kiener. Pl. 24, figs. 99, 100, 1, 2.

Shell strongly spirally striate; yellowish brown, marbled with chestnut, which is interrupted by the revolving sculpture so as to form many short, close lines of color. Length, 35 mill.

Fiji Islands (Sowb.), *China.*

C. subæqualis, Sowb. (fig. 100), a young shell, *C. Sowerbyi*, Reeve (fig. 1), and *C. cingulatus*, Reeve, not Lamarck (fig. 2), are synonyms.

C. CINGULATUS, Lam. Pl. 24, figs. 3, 4.

Shell with nearly direct sides, body-whorl sulcate below; yellowish, striped longitudinally with chestnut, with close series of revolving chestnut spots. Length, 1·85 inches.

Philippines.

Very closely allied to *C. undatus*, Kr., and possibly a variety of that species; both of them are too closely related to *C. arcuatus*, Brod. and Sowb. *C. Sinensis*, Sowb. (fig. 4), is a synonym.

C. ACUTANGULUS, Hwass. Pl. 24, fig. 5.

Shell with concavely elevated spire, carinate and usually minutely tuberculate at the sutures; body-whorl encircled by punctate grooves; white, clouded with light chestnut, with usually an ill-defined central white band. Length, ·5–1 inch.

Philippines.

Is very probably the young of *C. cancellatus*, Lam. The West Indian species usually known to American collectors under this name, I refer to *C. verrucosus*, Hwass.

C. COMMODUS, A. Ad.

Shell elongately turbinated, narrow, smooth, base obliquely sulcate; white, under a fulvous epidermis; spire elevated, con

Digitized by Google

vexly acute, variegated with light fulvous; apex elate, acute, body-whorl acute and carinated behind.

Habitat unknown (Mus. Gruner).

An unfigured species; no dimensions given.

C. WILMERI, Sowb. Pl. 24, fig. 6.

Shell fusiform, pale brown, transversely ribbed, ribs strong, rounded, smooth, equal in width to the interstices, which are crossed with thread-like striæ; spire very elevated, whorls eleven, flatly sloping, with three deep-cut spiral grooves, keeled at the angle, a spiral cord against the suture; last whorl with the upper angle acutely keeled, sides sloping, and attenuated towards the base; aperture narrow; lip slightly sinuated at the upper extremity. Length, 21 mill.

Andaman Islands.

Much narrower than *C. acutangulus*, with a very elevated spire. Possibly a young shell of a form of *C. d'Orbignyi.*

C. TENUISULCATUS, Sowb. Pl. 24, fig. 7.

Body-whorl narrowly distantly sulcate; white, three-fasciate with large, light brown spots. Length, ·75 inch.

Habitat unknown.

An immature shell, which does not appear to possess any remarkable distinctive characters; is closely allied to *C. rarimaculatus*, described in the same paper and figured on the same plate by Sowerby.

C. TRISTIS, Reeve. Pl. 24, fig. 8.

Shell smooth, grooved towards the base, spire concavely raised, striated, finely nodulous, nodules of the last whorl obsolete; white. Length, 1 inch.

Habitat unknown.

The figure appears to be that of a dead specimen which has lost its color through bleaching.

C. BORNEENSIS, Ad. and Reeve. Pl. 24.

Spire elevated, whorls channeled, carinate, lower part of body-whorl distantly sulcate; white, blotched here and there on the body and spire with chestnut. Length, 1·75 inches.

Borneo, Australia.

Perhaps too closely related to *C. undatus*, Kiener. *C. acuti-*

Digitized by Google

marginatus, Sowb. (fig. 10), and *C. Lizardensis*, Crosse (fig. 11), are referred as synonyms to this species by Dr. Weinkauff; they are both young shells.

C. VERRUCOSUS, Hwass. Pl. 24, figs. 12–18.

Spire raised, smooth, slightly gradate, sometimes obsoletely tuberculate; body-whorl distantly, narrowly sulcate; spaces between the sulci plane, sometimes smooth, usually tuberculated; yellowish white, irregularly clouded with orange or chestnut.

Length, ·75–1·2 inches.

W. Coast of Africa, West Indies.

The smoother form of this species is usually known under the name of *acutangulus*, Hwass—which is a Philippine Islands shell, differing in its smaller size, want of tubercles and punctured sulcations. *C. echinulatus*, Kiener (fig. 13), *C. nodiferus*, Kiener (fig. 15), *C. sticticus*, A. Ad. (fig. 14), *C. Mindanus*, Hwass (fig. 16), *C. cretaceus*, Kiener (fig. 17), *C. anaglypticus*, Crosse (fig. 18), and possibly *C. elventinus*, Duclos, are synonyms.

C. CORRUGATUS, Sowb. Pl. 24, fig. 19.

Shell closely sulcate, the interstices raised, rounded and more or less granular; light chestnut, spotted with dark chestnut, with a median lighter band. Length, ·75 inch.

China (specimen from Sowerby).

A more slender and much more finely sculptured shell than *C. verrucosus*, with the edges of the spire-whorls neatly spotted with brown.

C. PAPALIS, Weinkauff. Pl. 24, fig. 20.

Shell fusiformly turbinated, swollen at the shoulder, encircled throughout with fine, equidistant ridges; spire proportionally large, elevated, strongly coronated, white; body-whorl olive-ash, marked below by small oblong-square white flakes.

Length, ·5 inch.

Philippines.

Undoubtedly a very young shell. It was described by Reeve under the name of *C. coronatus*, preoccupied by Dillwyn for another species. Is it a young *C. pontificalis*?

Digitized by Google

C. SEMISULCATUS, Sowb. Pl. 24, fig. 21.

Spire concavely acuminate, the whorls near the apex minutely beaded; body-whorl distantly sulcate below; chestnut-brown. Length, ·85 inch.

Habitat unknown.

C. CALEDONICUS, Hwass. Pl. 25, fig. 22.

Orange, encircled by numerous thread-like chestnut lines, the lower of which are very finely granulated; spire somewhat acuminated, obsoletely coronated. Length, 2·25 inches.

New Caledonia (Capt. Cook).

Described from a specimen obtained during Capt. Cook's voyage around the world, and not identified with any subsequently discovered specimens. The original of my figure was drawn from what is believed to be the type specimen, forming part of the Delessert (Geneva) collection.

Section XIV. TEREBRI.

Hermes (Montf.), Mörch, pars.

C. NUCLEUS, Reeve. Pl. 25, fig. 23.

Shell with fine revolving striæ; orange-brown, with an irregular white band, and spots; aperture violaceous. Length, ·9 inch.

Philippines, New Caledonia.

Possibly only a variety of the next species.

C. LUTEUS, Brod. Pl. 25, figs. 24, 25.

Shell yellow, pink or purplish, encircled by chestnut lines which are mostly broken up into chestnut and white articulations, an irregular white band below the middle; aperture purplish, with a central white band. Length, 1–1·5 inches.

Island of Annaa.

C. GLANS, Hwass. Pl. 25, figs. 26–28.

Shell encircled throughout with coarse or fine striæ, which are sometimes granular; violaceous or brown, with a few lighter spots on the spire, and usually a light irregular band below the middle of the body-whorl; aperture violaceous.

Length, 1–1·75 inches.

Philippines, Australia, N. Caledonia, Polynesia.

C. tenuistriatus, Sowb. (fig. 28), is a synonym.

Digitized by Google

C. SCABRIUSCULUS, Chemn. Pl. 25, fig. 29.

Shell striate throughout, sometimes minutely granular; chestnut or chocolate-color, with large white maculations on spire and below the shoulder, as well as around the middle of the body-whorl; base of body-whorl tinged with purple; aperture tinged with purple. Length, 1–1·5 inches.

Caroline Is., Philippines, Australia, N. Caledonia.

C. fabula, Sowb., is a synonym.

C. TENDINEUS, Hwass. Pl. 25, fig. 30.

Shell striate, sometimes granular throughout; violaceous chestnut, under an olive-brown thin epidermis, with large oblong white spots, arranged in two series on the body-whorl, one series below the shoulder, the other below the middle, base also white or violaceous; aperture tinged with violet.

Length, 2–2·5 inches. *I. Bourbon, Mauritius, Annaa.*

C. TEREBRA, Born. Pl. 25, figs. 31–33.

Shell striated throughout; pale yellowish or ash-color, indistinctly two-banded, often somewhat tinged with violet at the base; aperture white or slightly violaceous.

Length, 1·75–4 inches.

Red Sea, Nicobar Is., Ceylon, Isl. of Bourbon, Philippines, N. Australia, New Caledonia, Fiji Islands.

C. cœlebs, Hinds (fig. 32), is a young specimen, and *C. Thomasi*, Sowb. (fig. 33), differs only in the spire being somewhat shorter than usual.

C. CAILLIAUDI, Kiener. Pl. 25, fig. 34.

Shell narrow, smooth, with low spire and undulated or slightly tuberculated shoulder; yellowish, encircled throughout by narrow chestnut lines. Length, 2 inches. *Habitat unknown.*

C. NUSSATELLA, Linn. Pl. 25, fig. 35.

Shell closely striated, the striæ minutely granular; yellowish white, clouded irregularly with orange-brown or light purple-brown, with numerous chestnut spots on the striæ.

Length, 1·5–2·25 inches.

Red Sea, E. Africa, Ceylon, Java, Philippines, N. Australia, N. Caledonia, Polynesia.

Digitized by Google

C. TENELLUS (Chemn.), Auct. Pl. 25, fig. 36.

Shell narrow, cylindrical, encircled by minutely granose striæ; whitish, broadly three-banded by oblong longitudinal clouds of orange-brown, the interstices brown-spotted. Length, 1·75 inches.

Australia.

This is the *C. artoptus*, Sowb., and *C. spectabilis*, A. Ad.

C. CLAVUS, Linn. Pl. 25, figs. 37, 38.

Shell cylindrical, with revolving striæ throughout; two-banded with orange-brown and covered with large and small reticulating lines of the same color; spire convex, maculated.

Length, 2 inches.

Java, Philippines, New Caledonia, Polynesia.

Related by its coloring to the *textile* group.

Var. DACTYLOSUS, Kiener. Pl. 25, fig. 38.

Shell narrower, the reticulated pattern much smaller and more uniform in the size of the meshes, interrupted by three or four broad, uniform orange-brown bands.

C. CIRCUMCISUS, Born. Pl. 25, figs. 39, 40.

Shell thin, striated throughout; yellowish or violaceous white, clouded with chestnut, with distant revolving series of chestnut spots and short lines, most conspicuous on two irregular lighter bands. Length, 2–2·5 inches.

Philippines.

This species is also well-known under the name of *C. dux*, Hwass, given to it several years later. *C. Du Saveli*, H. Adams (fig. 40), from Mauritius, is a beautifully colored variety.

C. BRAZIERI, Sowb. Pl. 25, fig. 41.

Shell rather solid, with revolving striæ throughout; whitish, tinged with pale rose-pink, with two broad, light yellowish brown bands, sprinkled here and there with a few very minute brown spots; spire conspicuously marked with dark brown blotches.

Length, 75 mill.

Solomon Islands (Brazier).

Closely allied to the preceding species.

C. GRANULATUS, Linn. Pl. 25, figs. 42, 43.

Shell regularly grooved throughout the body-whorl, the inter-

Digitized by Google

stices plane or granular; spire striate, often gradate; orange-red, raised portions with very narrow chestnut revolving lines, white-clouded, especially in the middle, forming an irregular band, which is mottled and bordered with chestnut; interior rosy.

Length, 1·5–2 inches.

West Indies.

C. verulosus, Hwass. (fig. 43) = *C. fusus*, Gmel., appears to be only a worn state of this species, devoid of color.

✓ C. COCCINEUS, Gmelin. Pl. 25, fig. 44.

Shell thin, with somewhat convex sides, encircled by striæ, which are often minutely granular; spire moderate, sometimes gradate, striate, obsoletely coronated; orange pink, with a white central band, variegated with dark brown spots and blotches; spire usually maculated. Length, 1·25–1·75 inches.

Philippines, New Caledonia.

This shell is equally well known as *C. Solandri*, Brod.

C. FILAMENTOSUS, Reeve. Pl. 26, fig. 45.

Shell oblong-conical, obtusely angled at the upper part, slightly inflated, smooth, encircled throughout with narrow distant grooves; spire striate, with raised, sharp apex; whitish, profusely clouded with yellowish orange; here and there scarlet-tinged, and closely encircled throughout with very fine thread-like lines of a darker color. Length, 28 mill.

Habitat unknown.

There are about five of the color-lines between each groove. I am not acquainted with this species.

✓ C. NIMBOSUS, Hwass. Pl. 26, fig. 46.

Rosy or violaceous white, with two faint chestnut bands, closely encircled by lines of small chocolate dots; body-whorl with close revolving grooves. Length, 1·45 inches.

Ceylon.

✓ C. AURISIACUS, Linn. Pl. 26, fig. 47.

Shell with slight revolving ridges, sometimes granulated below; spire channeled and striate; pink-white, with deeper-colored bands, distantly encircled by lines of short dashes and dots of chocolate; spire with conspicuous chocolate markings. Length, 2 inches.

Moluccas.

Digitized by Google

C. BARTHELEMYI, Bernardi. Pl. 26, fig. 48.

Shell covered with fine undulating striæ; orange-red, with a central white band, upon and in the neighborhood of which are a few chocolate spots; spire whitish, maculated with chocolate. Length, 3·75 inches.

Chagos Isl.

Dr. Weinkauff makes this a variety of *C. aurisiacus.*

C. CYLINDRACEUS, Brod. and Sowb. Pl. 26, figs. 49, 50.

Shell with fine revolving striæ, somewhat granulous towards the base; chestnut, longitudinally streaked with white, with frequently an upper and lower band of white maculations. Length, 1–1·5 inches.

Society Islands; New Caledonia.

C. MITRATUS, Hwass. Pl. 26, figs. 51, 52.

Shell covered with granulated revolving striæ; white, encircled near the shoulder, on the middle and base by large chestnut maculations, forming three interrupted bands; spire maculated with brown. Length, 28 mill.

Isl. Bourbon, Philippines, New Caledonia.

This shell much resembles in form *Dibaphus edendulus*, one of the Mitridæ.

C. Pupæformis, Sowb. (fig. 52), described as a variety, is identical.

C. CREBRISULCATUS, Sowb. Pl. 26, fig. 53.

Shell red, sulcate, with smooth, elevated spire, beaded at the angles. Length, 15 mill.

Sandwich Islands (Weinkauff).

C. TRAILLII, A. Ad. Pl. 26, fig. 54.

Shell finely sulcated, yellowish white, with two broad bands of tessellated chocolate spots. Length, 12 mill.

Malacca.

C. PUNCTURATUS, Hwass. Pl. 26, fig. 55.

Shell cancellated with longitudinal and revolving lines, pale ash-color; spire striated, obsoletely coronated, spotted with brown, apex rose-tinted. Length, 10 mill.

Australia.

Digitized by Google

Section XV. Bulbi.

Conella, Swainson.

C. Africanus, Kiener. Pl. 26, figs. 56–62.

Shell turbinated, obtusely inflated above; chestnut or chocolate color, with white maculations, forming an irregular broad central band; spire maculated. Length, 1·25 inches.

Guinea, West Africa.

Var. bulbus, Reeve. Pl. 26, fig. 57.

Shell longitudinally irregularly striped with chocolate and white.

Var. Duponti, Kiener. Pl. 26, fig. 58.

Shell shorter and broader, with irregular chestnut and white maculations.

Var. Grayi, Reeve. Pl. 26, figs. 59, 60.

Shell gray or ashy blue, ornamented with large, waved chocolate spots, generally arranged so as to form two bands; aperture violaceous. Length, 1 inch.

? *Australia* (Brazier); *L. Guinea* (Dunker).

C. obtusus, Kiener (fig. 60), is a synonym.

Var. guttatus, Kiener. Pl. 26, fig. 61.

Shell yellowish brown, with irregular small chocolate blotches, and a few small spots in revolving series.

Var. variegatus, Kiener. Pl. 26, fig. 62.

Yellowish brown or chestnut-color, maculated with brown on the shoulder, with numerous fine chocolate revolving lines often broken up into spots.

C. zebroides, Kiener. Pl. 26, fig. 62 *a*.

Shell yellowish brown, longitudinally, irregularly striped with chestnut, extending over the spire. Length, 47 mill.

Australia.

No locality is given by Kiener for this species, but *C. Cooki*, Brazier (unfigured), described from Botany Bay, New South Wales, a shell 20 mill. in length, appears to be a younger specimen of the same species.

Digitized by Google

C. CONCINNULUS, Crosse. Pl. 26, fig. 63.

White, with chestnut waved longitudinal markings.

Length, ·75 inch. *Gulf of California.*

The specific name is substituted for *C. concinnus*, Brod., preoccupied by Sowerby, sen. I am not acquainted with the species.

C. ATRAMENTOSUS, Reeve. Pl. 26, fig. 64.

Shell encircled by finely pricked grooves; chestnut-color with generally a few white spots on the shoulder, and white-tinted at the base. Length, 12 mill.

Philippines, New Caledonia, Sandwich Is.

C. fusiformis = *C. parvus*, Pease, an unfigured species from the Sandwich Islands, is identical; I have authentic specimens before me.

C. HIEROGLYPHICUS, Duclos. Pl. 26, fig. 65.

Shell cylindrically ovate, ashy violet-color, ornamented with two bands of peculiarly sinuated white spots; with revolving series of pale granules; spire convexly acute, variegated; base striated. Length, ·85 inch.

? West Indies.

C. LUGUBRIS, Reeve. Pl. 26, fig. 66.

Shell finely striated, rudely ridged at the base, ridges few and distant, spire conspicuously grooved; chocolate-black, obscurely reticulated here and there with numerous aggregated small white spots. Length, ·75 inch. *West Africa.*

C. hieroglyphicus, var. Kiener, is identical.

Section XVI. TULIPÆ.

Nubecula, Klein (in part).

C. STRIATUS, Linn. Pl. 26, fig. 67.

Shell irregularly clouded with pink-white and chestnut or chocolate, with fine close revolving striæ, forming the darker ground-color by close colored lines; spire tessellated with chestnut or chocolate and white, its whorls slightly channeled, carinate and striate. Length, 2·5–3·5 inches.

Red Sea, East Africa, Ceylon, Philippines, Australia, New Caledonia, Viti Islands.

C. terminus, Kiener (not Lamarck), is identical.

Digitized by Google

C. GUBERNATOR, Hwass. Pl. 26, figs. 68, 69.

Whorls of the spire carinate, channeled and striate, tessellated with chestnut; body-whorl pink-white, longitudinally clouded with chestnut or chocolate, often obscurely two-banded; several distant sulci towards the base. Length, 2·5–4 inches.

East Africa, *Madagascar*, *Mauritius*, *Ceylon*, *Philippines*, *New Caledonia*.

C. terminus, Lam. (fig. 69), is described as having a less rounded shoulder, is narrower, etc.; but in the series before me the transition forms make a series of stages so complete that I cannot separate *C. terminus* even as a variety.

C. BOIVINI, Kiener. Pl. 28, fig. 70.

Spire depressed, channeled; body-whorl with equidistant revolving punctured grooves, obsolete in the middle; yellowish white, with two light brown bands, and a few hieroglyphic markings. Length, 2·5 inches.

East Africa (Weinkauff).

C. MELANCHOLICUS, Lam. Pl. 28, fig. 71.

Shell elongated, rather cylindrical, cancellated with exceedingly fine striæ; orange-red, with a band of white spots at the shoulder and another below the middle of the body-whorl; spire smooth and sharp, spirally striated, variegated with orange-red.

Length, 2 inches.

Habitat unknown.

The type specimen remains unique.

C. RHODODENDRON (Couthouy), Jay. Pl. 28, fig. 72.

Spire depressed, channeled and striate; body-whorl grooved above and below, smooth in the middle; rosy white, with numerous small triangular chestnut spots and three bands of violaceous and chestnut clouds and reticulations.

Length, 1·75–2·25 inches.

Australia, *New Guinea*, *Polynesia*.

Perhaps the most beautiful species of the genus. *C. cingulatus*, Sowb. (not Lamarck), is a synonym, and *C. discrepans*, Sowb., a dead, colorless shell, not adult, but with the same form and grooving, is referred here by Dr. Weinkauff.

C. FLOCCATUS, Sowb. Pl. 28, figs. 73, 74.

Shell oblong, subcylindrical, solid, granosely sulcate below;

Digitized by Google

light purplish, with longitudinal flames and revolving bands of chestnut, and lines of angulate white spots.

Length, 2·5 inches.

Philippines.

C. Magdalenæ, Kiener (fig. 74), is a pale variety.

C. JULII, Liénard. Pl. 28, figs. 75, 76.

Shell white, upper part of body-whorl, spire and interior, tinged with pink, body-whorl with longitudinal chestnut strigations, forming two irregular bands. Length, 1·5 inches.

Mauritius.

This is perhaps only a variety of *C. floccatus;* the figure which Kiener gives under that name (fig. 76), appearing to be somewhat intermediate in its characters.

C. BULLATUS, Linn. Pl. 28, fig. 77.

Shell inflated, thin, grooved below; white, clouded with orange-red and chestnut, forming two ill-defined bands, with indistinct revolving rows of white and chestnut articulations; aperture pink. Length, 1·5–2·5 inches.

Philippines, N. Caledonia.

It is the *C. Tinianus* of Kiener, not Küster.

C. CERVUS, Lam. Pl. 28, figs. 78, 79.

Shell large, cylindrically inflated, thin, pale rosy yellow, encircled by lines and bands of chestnut and white spots, and hieroglyphic markings. Length, 4·25 inches.

Moluccas.

Allied to *C. bullatus*, but much larger and differently fasciated, yet it may prove to be only a gigantic variety of that species.

Var. CUVIERI, Crosse.

Shell smaller, pale fawn-color, with a few large white blotches, especially about the middle, and numerous close revolving lines of chestnut spots. Length, 2 inches.

Red Sea, Australia.

The name was substituted by Crosse for *C. Deshayesii*, Reeve, preoccupied for a fossil species.

C. TULIPA, Linn. Pl. 28, figs. 80, 81.

Shell variegated with violet and white, clouded with chestnut,

Digitized by Google

with numerous revolving rows of minute chestnut and white articulations; interior violaceous. Length, 2–2·5 inches.

East Africa, *Red Sea*, *Ceylon*, *Philippines*, *New Caledonia*, *Polynesia*.

The synonymy includes *C. floridus*, Sowb. (fig. 81).

C. VIOLACEUS, Reeve. Pl. 28, figs. 82, 83.

Shell subcylindrical, violaceous, with chestnut blotches, forming three interrupted bands, and faint lines of minute chestnut and white articulations. Length, 1–1·25 inches.

Philippines, *Isl. Annaa*, etc.

With this I unite *C. obscurus*, Reeve (fig. 83), and *C. geographus*, var. of Sowb. It differs from young shells of *C. tulipa* in its more cylindrical form and in having three bands.

C. GEOGRAPHUS, Linn. Pl. 28, fig. 84; Pl. 29, fig. 85.

Shell thin, cylindrically inflated, with thread-like revolving striæ, usually nearly obsolete except at the base; spire striated and coronated; pink or violaceous white, clouded and coarsely reticulated with chestnut or chocolate, usually forming two very irregular bands; aperture violaceous white.

Length, 3–5 inches.

E. Africa, *Red Sea*, *Ceylon*, *Philippines*, *N. Caledonia*, *Polynesia*.

Var. MAPPA, Crosse. Pl. 29, fig. 85.

Shell smaller, more cylindrical, rose-color, marked as in the typical form; base of body-whorl obsoletely grooved. The name was substituted by Crosse for *C. intermedius*, Reeve; the latter being preoccupied by Lamarck for a fossil species.

Section XVII. TEXTI.

Cylinder, Montf. *Textilia*, Swains.

C. AUREUS, Hwass. Pl. 29, fig. 86.

Shell subcylindrical, with fine revolving striæ; orange-brown, very finely reticulated with chestnut, with larger subtriangular spots of white, aggregated into masses and bands at the shoulder, middle and base; there are usually a number of longitudinal streaks of chestnut running over the orange-brown reticulated spaces. Length, 1·5–2 inches.

Moluccas, *Philippines*, *New Caledonia*.

Digitized by Google

C. PAULUCCIÆ, Sowerby. Pl. 29, fig. 87.

Shell elongated, rather solid, obsoletely striated, very obtusely angulated behind and attenuated to the front; whitish, with broad interrupted bands of orange, longitudinally streaked with chestnut-brown, intersected by a net work of triangular orange lines; spire pyramidal, whorls faintly spirally grooved; aperture narrow, white. Length, 2·25 inches.

Mauritius.

The form is more tapering and surface smoother than *C. aureus*. It is perhaps a variety of the next species.

C. PYRAMIDALIS, Lam. Pl. 29, figs. 88, 89.

Shell smooth, conical, finely striated at the base; violaceous or flesh-color, covered by chestnut or chocolate reticulations, and doubly banded. Length, 1·75 inches. *Australia.*

This species is not well understood; with some of the figures illustrating it; *C. Paulucciæ* seems to be very closely allied, whilst Reeve's conception of it is a shell approaching *C. textile*. *C. convolutus*, Sowb. (fig. 89), appears to differ only in its more vivid coloring.

C. GLORIA-MARIS, Hwass. Pl. 29, fig. 90

White, finely reticulated with orange-brown lines, enclosing triangular spaces, with three interrupted bands of chestnut hieroglyphic markings. Length, 3–5 inches.

Philippines.

A magnificent and very rare species.

C. RETIFER, Menke. Pl. 29, fig. 91.

Shell pear-shaped, with revolving striæ; reticulated orange-brown with large and small triangular white patches, and zigzag longitudinal chocolate markings, mostly interrupted so as to form one or two bands; interior light violaceous.

Length, 1–1·75 inches.

Philippines to *Sandwich Islands.*

Equally well known under Sowerby's name of *C. solidus*. Its nearest ally is *C. verriculum*, Reeve, a stumpy variety of *C. textile*.

C. TEXTILE, Linn. Pl. 29, figs. 92–99; Pl. 30, figs. 100–7.

Shell yellowish brown, with undulating longitudinal lines of

Digitized by Google

chocolate, interrupted by triangular white spaces; these last are irregularly disposed, but crowded at the shoulder, base and middle so as to form bands; spire similarly marked; aperture white. Length, 2·5–3 5 inches.

Mauritius, *Red Sea*, *Ceylon*, *Japan*, *Philippines*, *Australasia*, *Viti Islands*, etc.

The synonymy includes *C. vicarius*, Lam. (fig. 95), *C. scriptus*, Sowb. (fig. 96), in which the reticulations cover most of the surface.

Var. TELATUS, Reeve. Pl. 29, figs. 97, 98.

The triangular reticulations much finer than in the type. In a specimen before me the usual three bands are each divided into two, with narrow intervening spaces. Another slight modification of pattern of coloring is *C. tigrinus*, Sowb. (fig. 98).

Var. VERRICULUM, Reeve. Pl. 29, fig. 99.

Shell shorter and proportionally wider than the type; the triangular white markings are usually larger and cover more of the surface. Approaches the preceding species, *C. retifer*.

Var. EUETRIOS, Sowb. Pl. 30, fig. 100.

Shell finely reticulated with chocolate lines over the white surface, as to cause it to appear a uniform chocolate-color at a distance, crossed by three broad bands of darker color.

Approaches *C. Elisæ*, Kiener.

Var. ARCHIEPISCOPUS, Hwass. Pl. 30, figs. 1–3.

Shell smaller than the type, with much smaller reticulations, more completely covering the surface. Connected with *textile* by intermediate stages. *C. canonicus*, Hwass. (fig. 2), does not appear to be essentially different, and *C. rubescens*, Bonnet, and *C. Madagascariensis*, Sowb. (fig. 3), may also be placed here.

Var. CONDENSUS, Sowb. Pl. 30, fig. 4.

Shell narrower than the type, connecting with *C. auratus*.

Var. LEGATUS, Lam. Pl. 30, fig. 5.

Shell small and rather narrow, with strong longitudinal chocolate markings over the reticulations. This is essentially a young state of *C. canonicus*, above, into which it passes with growth.

Digitized by Google

Var. VICTORIÆ, Reeve. Pl. 30, fig. 6.

Differs from the type in the reticulations being mostly smaller, and light-colored, contrasting strongly with the bands of very dark chocolate longitudinal stripes, and in being more or less overlaid with violaceous clouds.

Australia.

Var. COMPLANATUS, Sowb. Pl. 30, fig. 7.

Shell more inflated than *C. Victoriæ*, with much shorter spire, the reticulations more delicate, the bands much lighter in color. This shell, also from Australia, probably passes into the form *Victoriæ*.

C. PREVOSTI, Sowb. Pl. 30, fig. 8.

Shell narrow, sulcate below; orange, obscurely fasciated with chestnut, and finely reticulated with narrow orange lines; spire with two striæ. Length, 40 mill.

New Caledonia.

I am not acquainted with this species.

C. CONCATENATUS, Kiener. Pl. 30, fig. 9.

White, very openly reticulated with orange-red lines.

Length, 35 mill.

Habitat unknown.

An unrecognized form, which may prove to be a variety of *C. textile*.

C. DALLI, Stearns. Pl. 30, fig. 10.

Spire indistinctly grooved; body-whorl obscurely spirally ribbed below; yellowish brown, with reddish brown longitudinal stripes, interrupted by four revolving bands of white spots, and occasional white spots on the darker surface; interior rosy pink.

Length, 2·15–2·35 inches.

Gulf of California.

Closely allied to *C. textile*, but the spire has a convex outline, the interior is roseate, the spots are smaller, etc. The distribution of *C. textile* is entirely different; yet this may be only a variety.

C. LUCIDUS, Mawe. Pl. 30, fig. 11.

Shell white, encircled by equidistant narrow chestnut lines, which are connected longitudinally by semicircular lines—some-

reticulatus

Digitized by Google

times crowded, but usually distant, forming series of open reticulations; spire fasciculated with chestnut.

Length, 1·5–2·35 inches.

Isle of La Plata, W. Coast of Central America.

C. ABBAS, Hwass. Pl. 30, figs. 12–14.

Shell white, very finely reticulated with narrow orange-brown lines, with a broad central and often narrower upper and lower bands of darker color bearing occasional longitudinal chocolate stripes. Length, 1·5–2·5 inches.

E. Africa, Ceylon, Philippines, New Caledonia.

Very closely allied to *C. textile*, but the shell is smaller, the reticulations much smaller, the longitudinal streaks rarely apparent, and the dark bands of *abbas* occupy about the same positions as the lightest markings of *textile*.

Var. PANNICULUS, Lam. Pl. 30, figs. 13, 14.

Body-whorl with four bands of fine reticulations, and three bands bearing longitudinal chocolate stripes. *C. corbula*, Sowb. (fig. 14), is very similar in its markings.

C. ELISÆ, Kiener. Pl. 30, fig. 15.

Shell white, so closely finely longitudinally lined and reticulated with chocolate, as to appear like a chocolate surface with innumerable white specks, with two or three broad darker bands.

Length, 2 inches.

Madagascar.

C. CROCATUS, Lam. Pl. 31, figs. 16, 17.

Shell saffron-yellow, with a few scattered small white triangular spots; spire tessellated with chestnut. Length, 2·75 inches.

Philippines, New Caledonia.

C. RACEMOSUS, Sowb. Pl. 31, fig. 18.

Shell rather solid, smooth, with convex spire; brownish orange-color, with obscure revolving lines sparingly articulated with white, and clusters of white triangular spots, mostly disposed in three bands. Length, 2·15 inches.

Sandwich Islands.

Very doubtfully distinct from the following species.

C. OMARIA, Hwass. Pl. 31, figs. 19–28.

Shell varying from orange-brown to chocolate-color, covered

Digitized by Google

by minute white spots, and overlaid by larger white triangular spots, sometimes forming bands at the shoulder, middle and base. Length, 2–3 inches.

Red Sea, Ceylon, Philippines, Australia, Polynesia.

With this species I am compelled to unite *C. pennaceus*, Born (figs. 20, 21), *C. prælatus*, Hwass (fig. 22), *C. episcopus*, Hwass (figs. 23, 24), *C. rubiginosus*, Hwass (fig. 25), *C. magnificus*, Reeve (fig. 26), and *C. stellatus*, Kiener (fig. 27), the latter a juvenile.

Var. COLUBRINUS, Lam. Pl. 31, fig. 28.

Shell rather narrower, marked like *C. textile*, with longitudinal chocolate streaks, the triangular white spots fewer and smaller.

C. AULICUS, Linn. Pl. 31, figs. 29, 30.

Shell rather narrow, with elevated spire; chocolate-brown, covered by elevated close revolving lines of darker color; surface irregularly overlaid by subtriangular white spots, some of which are very large. Length, 3·5–5·5 inches.

Mauritius, Ceylon, Philippines, N. Caledonia, Viti Isles, etc.

Distinguished by its form and revolving raised lines, and the absence of white articulations.

C. AURATUS, Lam. (fig. 30), is distinguished only by a redder color and occasional minute white spots on the revolving striæ; it is scarcely entitled to a varietal name.

Undetermined and Spurious Species.

The following names, mostly of long standing, have not been identified with any of the species by either of the monographers. The descriptions are usually insufficient, and the references to the plates (sometimes the figures themselves) perplexing.

C. PUSIO, Lam.; C. JASPIDEUS, Gmel.; C. INSULARIS, Gmel.; C. LEOPARDUS, Meusch.; C. FUSIFORMIS, Lam.; C. LAMELLOSUS, Brug.; C. ZICZAC, Muhlf.; C. NIGER, Jay.

C. SINENSIS, Gmel. (? An artificially colored specimen.—Von Martens.)

Digitized by Google

C. LUTEUS, Quoy. Voy. Astrol. (Scarcely a Cone.—Sowerby.) The single specimen recorded by Quoy was lost.

C. MAURUS, Gray. *Australia.*

C. OCELLATUS, Gmel. (? Artificially colored.—Von Martens.)

C. CINCTUS, Val. *Acapulco.*

C. MAMILLARIS, Green. (The figure unrecognizable.) *Florida.*

The following recently described, but unfigured species, I am unable to locate.

C. CARMELI, T.-Woods. *Tasmania.*

C. SOPHIÆ, Brazier. *Solomon's Islands.*

C. PURUS, Pease. *Polynesia.*

Errata.

Page 12. After "*C. Lorenzianus*, Chemn.," add Sowerby, in part.

Page 38. After "*C. gradatulus*" read Weinkauff instead of Sowerby.

Digitized by Google

INDEX AND SYNONOMY.

CONIDÆ.

PAGE.

Abbas (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 750, . 92
Abbreviatus (Conus), Nuttall, Mss. Reeve, Icon., f. 86. . 22
= C. miliaris, Hwass., var.
Achates (Conus), Meuschen. E. A. Smith, Jour. Linn. Soc. xii, 536. = C. monachus, Linn.
Achatinus (Conus), Chemn. Conch. Cab., x, pl. 142, f. 1317. 64
Aculeiformis (Conus), Reeve. Proc. Zool. Soc., 1843, p. 176. 75
Acuminatus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 268, ... 31
Acutangulus (Conus), Chemn. Conch., xi, pl. 182, f. 1772, 1773, ... 76, 78
Acutimarginatus (Conus), Sowb. Thes. Suppl., f. 640, 641.
= C. Borneensis, Ad. and Reeve, var. 78
Acutus (Conus), Sowb. Thes. Conch., 119, fig. 142.
= C. Ceylonensis, Hwass, var. 23
Adamsoni (Conus), Gray, Mss. Brit. Mus., Reeve, Icon., f. 22.
= C. rhododendron, Couth.
Adansoni (Conus), Lam. An., s. Vert. vii, p. 502.
= C. Mediterraneus, Hwass, var. 66
Adansoni (Conus), Reeve, Icon., f. 190, 193.
= C. nigropunctatus, Sowb. 64
Adriaticus (Conus), Chiereghini. Crosse, Guerin's Mag., 203, 1858. = C. Mediterraneus, Hwass.
Adustus (Conus), Sowb. Thes. Conch., 204, fig. 403.
= C. classiarius, Hwass, juv. 41
Aegrotus (Conus), Reeve. Conch. Ic., pl. v., Sup., f. 250. . 45
Aemulus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 179.
= C. cœrulescens, Chemn. 66
Affinis (Conus), Gmel. Syst. Nat., 3391.
= C. circumcisus, Born.
Africanus (Conus), Kien. Sp. gen. Conch., 260, pl. 104, f. 2. 84
Africanus (Conus), Meusch. Sowb., Thes. Index.
= C. tæniatus, Hwass.
Agrestis (Conus), Spengl. Mörch, Kierulf Cat., p. 31.
= C. figulinus, L., var. Loroisi.

Digitized by Google

Alabaster (Conus), Ad. and Reeve. Reeve, Icon. Suppl., t. 6, f. 257, ... 72
Albicans (Conus), Sowb. Thes. Conch., iii, No. 13, f. 98, . 74
Albomaculatus (Conus), Sowb. Conch. Ill., f. 2.
= C. bœticus, Reeve, var. 26
Albospira (Conus), E. A. Smith. Proc. Zool. Soc., 1880, p. 480, pl. xlviii, f. 4, ... 59
Algoensis (Conus), Sowb. Proc. Zool. Soc., 1834, . . 69
Altispiratus (Conus), Sowb. Zool. Proc., 1873, pl. 15, f. 4, p. 146, ... 66
Alveolus (Conus), Sowb. Conch. Ill., f. 11.
= C. nisus, Chemn. 59
Amabilis (Conus), Lam. An. s. Vert., vii, p. 503.
= C. pertusus, Hwass, ... 54
Amadis (Conus) Martini. Conch. Cab., ii, p. 290, pl. 58, f. 642, 643, ... 30, 31
Amadis (Conus), Sowb., var. Thes. Conch., t. 8, f. 171.
= C. schech., Jeck.
Amazonicus (Conus), Chiereg. Crosse, Guerin's Mag., 203, 1858. = C. Mediterraneus, Hwass.
Ambiguus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 177, 13
Ammiralis (Conus) Linn. Syst. Nat. (Gmel. Ed.), p. 3378, 29
Anabathrum, Crosse. Jour. de Conch., t. 9, f. 4, 1865, . 33
Anaglypticus (Conus), Crosse. Jour. de Conch., 1865, p. 314, pl. 11, f. 8–8 *a*. = C. verrucosus, Hwass, . . . 78
Anceps (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 119.
= C. consors, Sowb. 52
Andamanensis (Conus), Smith. Proc. Zool. Soc., 1878, p. 804, pl. 50, f. 1–1 *a*, ... 57
Anemone (Conus), Lam. An. s. Vert., vii, p. 479, . . 69
Angasi (Conus), Tryon, ... 62
Angulatus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 118.
= C. regularis, Sowb. 37
Aplustre (Conus), Reeve, Proc. Zool. Soc., 1843, p. 171, . 67
Arachnoideus (Conus), Gmel. Syst. Nat., 3388 (part).
= C. araneosus, Hwass, ... 8
Araneosus (Conus), Hwass. Enc. Meth. Ver., i, pl. 2, p. 612, 8
Arausiensis (Conus), Chemn. Conch. Cat.
= C. daucus, Hwass.
Archetypus (Conus), Crosse. Jour. de Conch., 1865, pl. 10, f. 7, p. 313. = C. daucus, Hwass, ... 48
Archiepiscopus (Conus), Hwass. Enc. Method. vers., i, pt. 2, p. 747. = C. textile, Linn., var. 90
Archithalassus (Conus), Dillw. Desc. Cat., i, 374.
= C. ammiralis, Linn., var. 29
Archon (Conus), Brod. Proc. Zool. Soc., 1833, p. 54, . 27

Digitized by Google

Arcuatus (Conus), Brod. and Sowb. Zool. Jour., iv, p. 379, ... 75, 63
Arcuatus (Conus) Gray. Zool. Beechey. Voy., p. 119. = C. emarginatus, Reeve.
Ardisiacus (Conus), Kien. Coq. viv., p. 316, pl. 108, f. 1. ? = C. anemone, Lam. 70
Arenatus (Conus), Hwass. Enc. Meth. ver., i, pt. 2, p. 621, 18
Aristophanes (Conus), Duclos. Sowb., Thes. Conch., 63, f. 81, 82. = C. miliaris, Hwass, var. 22
Armiger (Conus), Crosse. Guerin's Mag., 205, 1858, . . 75
Armillatus (Conus), C. B. Ad. Contr. to Conch., p. 59. = C. Proteus, Hwass, ... 12
Articulatus (Conus) Sowb. Zool. Proe., 1873, pl. 15, f. 3, p. 145, ... 33
Artoptus (Conus), Sowb. Conch. Ill., f. 35. = C. tenellus, Chem., Sow. Thes. Index, . . . 81
Asper (Conus), Lam. Anim. sans Vert., vii, 467. = C. sulcatus, Hwass.
Aspersus (Conus), Sowb. Conch. Ill., fig. 16. = C. testudinarius, Martini. 65
Assimilis (Conus), A. Ad. Zool. Proc., 118, 1853. = C. magus, Linn. 53, 64
Ateralbus (Conus), Kien. Coq. viv., p. 313, pl. cviii, f. 4 and 4 *a*. = C. venulatus, Hwass, ... 14
Atramentosus (Conus), Reeve. Conch. Ic. Sup., pl. vii, f. 265, ... 85
Attenuatus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 180, 49
Augur (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 685, . 51
Aulicus (Conus), Linn. Syst. Nat. Edit., xii, p. 1171, . 93
Aurantius (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 606, 25
Auratus (Conus), Lam. An. sans Vert., vii, p. 516. = C. aulicus, Linn. 93
Aureolus (Conus), Sowb. Thes. Conch., f. 395.
Aureus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 742, . 88
Auricomus (Conus), Hwass. Encyc. Meth., 742, t. 346, f. 3. = C. clavus, Linn.
Auricomus (Conus), Lam. Anim. sans Vert., vii, 167. = C. aureus, Hwass.
Aurisiacus (Conus), Linn. Syst. Nat., 1170, . . 82, 83
Aurora (Conus), Lam. An. sans Vert., vii, p. 500. = C. rosaceus, Chemn. 56
Australis (Conus), Chemn. Conch., xi, pl. 183, f. 1774, 1775. 73

Baccatus (Conus), Sowb. Proc. Zool. Soc., 1876, p. 753, pl. lxxv, f. 5, ... 22
Badius (Conus), Kien. Coq. viv., p. 89, pl. xxxiii, f. 3. = C. nemocanus, Hwass, ... 39

Digitized by Google

Balteatus (Conus), Sowb. Conch. Ill., f. 58, ... 21
Balteus (Conus), Mawe. Wood, Index Test. Suppl., t. 3, f. 5, 1856. = C. cuneolus, Reeve, ... 55
Bandanus (Conus), Hwass. Enc. Meth., i, pt. 2, p. 611. = C. marmoreus, Linn., var. 8
Barbadensis (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 632. ? = C. miliaris, Hwass, var. abbreviatus, . . 22
Barbadensis (Conus), Reeve (not Hwass). Icon., f. 47. = C. nebulosus, Solander, ... 28
Barthelemyi (Conus), Bernardi. J. de Conch., 1861, p. 285; 1862, p. 46, pl. i, f. 12. = C. aurisaicus, Linn. . . 83
Bayani (Conus), Jousseaume. Rev. Zool., xxiii (2), p. 200, 1872, pl. xviii, f. 1, ... 35
Baylei (Conus), Jousseaume. Rev. Zool., xxiii (2), p. 198, pl. xviii, f. 2, 1872, ... 11
Bernardi (Conus), Kien. Ic. Coq. viv., p. 220, pl. 100, f. 2. = C. cinereus, Hwass, var. 58
Betulinus (Conus), Linn. Syst. Nat. (Gmelin), p. 3383, . 16
Bicolor (Conus), Sowb. Conch. Ill., fig. 18. = C. Proteus, Hwass, ... 12
Bifasciatus (Conus), Gmel. Syst. Nat., 3392. = C. centurio, Born.
Bifasciatus (Conus), Sowb. Thes. Conch., 186, f. 302, . 32
Biliosus (Conus), Bolt. Crosse, Mag. Zool., 205, 1858. = C. piperatus, Reeve.
Blainvillii (Conus), Kien. Coq. viv., p. 358, pl. cxi, f. 1. = C. classiarius, Hwass, ... 41
Blainvillei (Conus), Vign. Desc. = C. ammiralis, Linn.
Blanfordianus (Conus), Crosse. Jour. de Conch., 1867, pl. 2, f. 1, p. 66. = C. nisus, Chemn. 69
Bocki (Conus), Sowb. Proc. Zool. Soc., 1881, p. 636, pl. lvi, f. 7. = C. sulcatus, Hwass, var. 74
Bœticus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 174, . 26
Boivinii (Conus), Kien. Ic. Coq. viv., pl. 64, . . . 86
Borbonicus (Conus), H. Ad. Proc. Zool. Soc., 1868, p. 288, pl. xxvii, f. 1, ... 67
Borneensis (Conus), Ad. and Reeve. Moll. Voy. Sam., p. 18, pl. v, f. 8, ... 77
Borneensis (Conus), Sowb. Thes. Suppl., 439, f. 648. = C magus, Linn. 53
Brazieri (Conus), Sowb. Jour. of Conch., iii, 1881, p. 234, pl. 1, f. 9, ... 81
Breviusculus (Conus), Sowb. Conch. Illust., f. 55, list. = C. Proteus, Hwass, ... 12
Broderipi (Conus), Kien. (non Reeve). Icon., t. 71, f. 2. = C. rosaceus, Chemn. 56
Broderipii (Conus), Reeve. Proc. Zool. Soc., 1843, p. 179. 57

Digitized by Google

Bruguieri (Conus), Kiener. = C. Mediterraneus, Hwass, . 66
Brunneus (Conus), Gray. Wood's Index Test. Suppl., t. 3, f. 1, ... 28
Bulbus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 171. = C. Africanus, Kiener, var. 84
Bullatus (Conus), Linn. Syst. Nat. Edit., xii, 1172, . . 87
Bullatus var. (Conus), Sowb. Conch. Ill., f. 24. = C. cervus, Lam. 87
Buxeus (Conus), Link. Mus. Rostock, Crosse, Rev. Zool., 205, 1858. = C. quercinus, Hwass.
Buxeus (Conus), Reeve. Pro. Zoo. Soc., 1843, p. 180. = C. lignaris, Reeve, var. furvus.

Cabriti (Conus), Bernardi. Jour. Conch., vii, p. 377, pl. xiii, f. 2. = C. anemone, Lam.
Caffer (Conus), Krauss. Südafr. Moll., 131, t. 6, f. 24, . 68
Cailliaudi (Conus), Kien. Ic. Coq. viv., pl. 55, f. 5, . . 80
Caledonicus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 634, ... 79
Californicus (Conus), Hinds. Pro. Zoo. Soc., 1844, . . 17
Canaliculatus (Conus), Chemn. Conch., ii, pl. 181, f. 1748, 1749. = C. Malaccanus, Hwass.
Cancellatus (Conus), Lam. An. sans Vert., vii, p. 500, . 74
Candidus (Conus), Born. Index Test. Mus. Cæs. = C. marmoreus, Linn.
Candidus (Conus), Kien. Coq. viv., p. 214, pl. xcvii, f. 1. = C. Pealii, Green, ... 36
Canonicus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 749. = C. textile, Linn., var. 90
Capitaneus (Conus), Chemn. Conch. Cab., xi, figs. 1764, 1765. = C. rattus, Hwass.
Capitaneus (Conus), Linn. Syst. Nat. (Gm. Ed.), p. 3376. 40
Capitaneus senex (Conus), Chem. Conch. Cab., xi, t. 183, f. 1786, 1787. = C. classiarius, Hwass.
Carnalis (Conus), Sowb. Pro. Zoo. Soc., 1878, p. 796, pl. xlviii, f. 2, ... 77
Cardinalis (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 632, 27
Carinatus (Conus), Swains. Zool. Ill., 1st ser., pl. 112. = C. consors, Sowb. 52
Carmeli (Conus), T.-Woods. Proc. Roy. Soc. Tasm., 1876, p. 134, ... 94
Carpenteri (Conus), Crosse. J. de Conch., 1865, pl. 9, f. 1. = C. vitulinus, Hwass., var. 51
Castaneus (Conus), Kien. Coq. Viv., pl. civ, f. 3, p. 209. = C. Archon., Brod., var. 27
Cassis (Conus), Meusch. Crosse, Rev. Zool., 205, 1858. = C. acuminatus, Hwass.

Digitized by Google

Castrensis (Conus), Gould. Cover Bost. Jour. Nat. Hist., iv, No. 1, Jan., 1842; Pro. Bost. Soc. N. H., i, p. 138, 1843. = C. thalassiarchus, Gray, ... 30
Castus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 180, . 66
Catenatus (Conus), Sowb. Proc. Zool. Soc., 1878, p. 796, pl. xlviii, f. 3, ... 63
Catus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 707, . 63
Catus (Conus), Issel (non Brug.) Mal. Mar Rosso, p. 142. = Var. nigropunctatus, Sowb.
Cecilei (Conus), Kien. Coq. Viv., pl. xcviii, f. 4, and pl. cvii, f. 3. = C. lignarius, Reeve, var. 51
Ceciliæ (Conus), Chemn. Crosse, Jour. Conch., t. vii, pl. 14, f. 5, p. 381, 1859. = C. capitaneus, Linn., var. . . 41
Cedo-nulli (Conus), Hwass. Encyc. Meth., 602, t. 316, f. 1–9. = C. nebulosus, Hwass. 28
Centurio (Conus), Born. Mus., pl. 7, f. 10, ... 33
Cerinus (Conus), Reeve. Conch. Ic. Suppl., pl. iii, f. 283, . 70
Cernicus (Conus), H. Adams. Proc. Zool. Soc., 1869, p. 272, pl. xix, f. 1. = Var. C. balteatus, Sowb. . . . 21
Cervus (Conus), Lam. An. sans Vert., vii, p. 510, . . 87
Cervus (Conus), Sowb. Conch. Ill., f. 94. = Var. Cuvieri, Crosse.
Ceylonensis (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 636, ... 23
Ceylonicus (Conus), Chemn. Conch., x, 67, pl. 142, f. 1318. = C. obesus, Hwass.
Chaldæus (Conus), Bolt. Mus. Sowb. Thes. Conch., Index. = C. vermiculatus, Lam.
Characteristicus (Conus), Chemn. Conch., xi, p. 54, pl. 182, f. 1760, 1761, ... 13
Chelyconus, Mörch. Yoldi Cat., 69, 1852. = S. G. Leptoconus, H. and A. Adams.
Chemnitzii (Conus), Dill. Desc. Cat. = C. capitaneus, var. Linn. Crosse, Rev. Zool., 1858, 203.
Chenui (Conus), Crosse. Rev. Zool., 120, 1858, Jour. Conch., vi, p. 381, pl. xi, f. 3, 4, 1858, ... 50
Chessoideus (Conus), Chiereg. Crosse, Guerin's Mag., 203, 1858. = C. Mediterraneus, Hwass.
Chytreus (Conus), Melvill, ... 17
Cibieli (Conus), Kien. Coq. viv., p. 242, pl. cvii, f. 2, . 46
Cidaris (Conus), Kien. Coq. viv., p. 57, pl. lxiii, f. 1 and 1 *a*. = C. Magellanicus, Hwass., var. 27
Cinctus (Conus), Swain. Zool. Illust., i ser., ii, t. 110. = pulchellus, Swain. 49
Cinctus (Conus), Val. Humboldt, Recueil d'Orbs., ii, 337. 94
Cinereus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 673. 58

Digitized by Google

Cinereus (Conus), Poli. Test. Sicil., iii, t. 45, f. 7.
= C. Mediterraneus, Hwass.
Cinereus (Conus), var. Sowb. Ill. Conch., f. 43.
= C. nisus, Chemn.
Cingulum (Conus), Gmel. Syst. Nat., 3378.
? = C. quercinus, Brug.
Cingulatus (Conus), Lam. An. sans. Vert., vii, p. 482, . 76
Cingulatus (Conus), Reeve. Icon., f. 158.
= C. undatus, Kiener, ... 76
Cingulatus (Conus), Sowb. Tank. Cat. App., p. 34, Conch. Ill., 108. = C. rhododendron, Couth. 86
Circæ (Conus), Chemn. Conch. Cab., xi, f. 1778, 1779.
= C. magus, Linn. 53
Circumcisus (Conus), Born. Test. Mus. Cæs., 163, 1780, . 81
Circumsignatus (Conus), Crosse. Jour. de Conch., 1865, p. 311, pl. 10, f. 4, ... 50
Citrinus (Conus), Gmel. Syst. Nat., 3389.
= C. lividus, Hwass, ... 45
Citrinus (Conus), Kiener. Iconog., t. 78, f. 4.
= C. mustellinus, Hwass, ... 41
Citrinus (Conus), Kien. Coq. viv., p. 248, pl. 59, f. 6, . 57
Clandestinus (Conus), Chemn. Conch. Cab., x, f. 1296.
C. magus, Linn. 53
Clarus (Conus), Smith. Ann. Mag., N. H., 1881, viii, 442, . 14
Classiarius (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 705, ... 41
Classiarius (Conus), Kiener. Iconog., t. 63, f. 3.
= C. capitaneus, Linn., var. 41
Clavus (Conus), Linn. Syst. Nat. (Gm.), p. 3390, . . 81
Clerii (Conus), Reeve. Proc. Zool. Soc., 1843, p. 175, . 37
Clodianus (Conus), Chiereg. Crosse, Guerin's Mag., 203, 1858. = C. Mediterraneus, Hwass.
Cocceus (Conus), Kiener. Iconog., t. 107, f. 1.
= C. nisus, Chemn., var. 59
Cocceus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 174, . 70
Coccineus (Conus), Gmel. Syst. Nat., 3390, . . . 82
Cœlatus, A. Adams. Zool. Proc., 117, 1853, . . . 10
Cœlebs (Conus), Hinds. Ann. Mag. N. H., 1843, p. 256.
= C. terebra, Born, ... 80
Cœlinæ (Conus), Crosse. Obs. sur. l. gen. Conus, 1, in Rev. Zool., 1858, pl. 2, f. 1, p. 117, ... 43
Cœrulescens (Conus), Chemn. Conch. Cab., xi, f. 1762–3.
= C. Mediterraneus, Hwass, var. 66
Cœrulescens (Conus), Lam. Anim. sans Vert., xii, 501.
= C. cinereus, Hwass.
Coffea (Conus), Gmelin. Syst. Nat., 3388, ... 42
Collisus (Conus), Reeve. Conch. Ic. Supp., 2, pl. viii, f. 273, 57

Digitized by Google

Colubrinus (Conus), Lam. An. sans Vert., vii, p. 517.
= C. omaria, Hwass, var. 93
Colubrinus (Conus), Reeve. Icon., f. 123.
= C. rubiginosus, Hwass.
Columba (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 709. 62
Columba, var. c. (Conus), Lam. Enc. Meth., pl. 331, f. 3.
= C. radiatus, Gmel., var. parius.
Commodus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 117, 76
Complanatus (Conus), Sowb. Thes. Suppl., 441, f. 650, 651.
= C. textile, Linn., var. 91
Compressus (Conus) Sowb. Thes. Conch., Suppl., 404, f. 602-603. = C. anemone, Lam. 70
Comptus (Conus), Ad. Proc. Zool. Soc., 1853, p. 119.
= C. castus, Reeve.
Comptus (Conus), Gld. Mex. and Cal. Shells, 14, t. 14, f. 123. = C. purpurascens, Brod. 65
Conarius, Dum. Zool. Anal., 166, 1806. = Conus, Linn.
Concatenatus (Conus), Kien. Coq. viv., p. 362, pl. 110, f. 1, 91
Concolor (Conus), Sowb. Conch. Ill., f. 59, ... 40
Concinnulus (Conus), Crosse. Obs. sur le genre Conus, 23, 85
Concinnus (Conus), Brod. Proc. Zool. Soc., 1833.
= C. concinnulus, Crosse. Rev. Zool., 1858, p. 205.
Concinnus (Conus), Sowb. Thes. Suppl., 438, f. 646.
= C. sapphirostoma, Weink. 62
Condensus (Conus), Sowb. Thes. Conch., Suppl., 417, f. 622.
= C. textile, Linn., var. 90
Conella, Swainson, ... 84
Connectens (Conus), A. Ad. Proc. Zool. Soc., 1854, p. 136.
= C. pulchellus, Swains. 49
Conorbis, Swainson. Malacol., 149, 312, 1840, ... 5
Consanguineus (Conus), E. A. Smith. Proc. Zool. Soc., 1880, p. 478, pl. 48, f. 1, ... 52
Consors (Conus), Sow. Conch. Ill., p. 42, ... 52
Conspersus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 180, 58
Consul (Conus), Boivin. Jour. de Conch., xii, 33, t. 1, f. 5, 6, 1864. = C. magus, Linn. 53
Contusus (Conus), Reeve. Conch. Ic. Suppl., pl. ii, f. 276, 60
Conulus, Rafinesque. Anal. Nat., 145, 1815.
= Conus, Linn.
Conus, Linn. Syst. Nat., edit. x, 712, 1758, ... 7
Convolutus (Conus), Sowb. Thes. Conch , 380, fig. 564, . 89
Cooki (Conus), Brazier. Proc. Zool. Soc , 1870, p. 109, . 84
Corallinus (Conus), Kien. Coq. viv., p. 246, pl. lxxiii, f. 2, 67
Corbula (Conus), Sowb. Thes. Conch., 365, fig. 573.
= C. abbas, Linn., var. 92
Cordigera (Conus), Sowb. Thes. Sup., 437, f. 468, pl. 21.
= C. nobilis, Linn. 30

Digitized by Google

Coronatus (Conus), Dillw. Desc. Cat., i, 143.
= C. miliaris, Hwass, ... 22
Coronatus (Conus), Reeve. Icon. Suppl., t. 7, f. 263, t. 9, 263 *a*. = C. papalis, Weink. 78
Coronaxis, Swainson. Malacol., 147, 311, 1840, . . 19, 25
Corrugatus (Conus), Sowb. Proc. Zool. Soc., 1870, p. 257, pl. xxii, f. 7, ... 78
Cosmographia (Conus), Martin. Univ. Conch., iv, pl. 125. E. A. Smith. Jour. Linn. Soc., xii, 506.
= C. monachus, Linn.
Costatus (Conus), Chemn. Conch., ii, t. 181, f. 1745 and 1747. = C. sulcatus, Hwass.
Couderti (Conus), Bernardi. Jour. Conch., t. 8, pl. 4, f. 314, 1860, ... 24
Coxeni (Conus), Brazier. Proc. Zool. Soc., 1875, p. 34, pl. iv, f. 10, ... 30
Crassus (Conus), Sowb. Thes. Conch., 203, fs. 254, 255.
= C. tessellatus, Born, var. 11
Crebrisulcatus (Conus), Sowb. Thes. Conch., 173, fig. 321, 83
Crenulatus (Conus), Kien. Coq. viv., p. 355, pl. cix, f. 1.
= C. armiger, Crosse, ... 75
Crepusculum (Conus), Reeve. Proc. Zool. Soc., 1843, p. 178.
= C. lividus, Hwass, var. 45
Cretaceus (Conus), Kien. Coq. viv., pl. xcix, f. 1.
= C. verrucosus, Hwass, ... 78
Creteus (Conus), Chiereg. Crosse, Guerin's Mag., 203, 1858.
= C. Mediterraneus, Hwass.
Crocatus (Conus), Lam. Anim. sans Vert., vii, p. 503, . 92
Crosseanus (Conus), Bernardi. Jour. Conch., 1861, p. 168, pl. vi, f. 3 and 4. Jour. Conch., 336, 1874. Jour. Conch., 168, t. 3, f. 3, 1878. = C. marmoreus, Linn., var. . . 8
Crotchii (Conus), Reeve. Conch. Ic. Suppl., pl. vi, f. 254, 15
Cryptoconus, Koenen, 1867. = Conorbis, Swains.
Cucullus, Bolt. Mus., 1798. = Conus, Linn.
Cumingii (Conus), Reeve. Conch. Ic. Sup., pl. viii, f. 277.
= C. virgatus, Reeve, var. 35
Cumingii (Conus), Reeve. Conch. Ic. Supp., pl. iii, f. 282.
? = C. vittatus, Lam. 43
Cuneatus (Conus), Sowb. Proc. Zool. Soc., 1873, pl. 15, f. 5, p. 146. = C. acuminatus, Hwass, var. 31
Cuneiformis (Conus), Smith. Quart. Jour. Conch., i, p. 202, 1876, ... 13
Cuneolus (Conus), Reeve. Proc. Zool. Soc., 1813, p. 173, . 55
Cuvieri (Conus), Crosse. Obs. sur le genre Cone, 12.
= C. cervus, Lam., var. 87
Cyanostoma (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 116, 14
Cylinder, Montfort. Conch. Syst. ii, 390, 1810, . . . 88

Digitized by Google

Cylindraceus (Conus), Brod. and Sowb. Zool. Jour., v, p. 51, t. 40, f. 5, ... 83
Cylindrella, Swainson. Malacol., 311, 1840, . . . 71

Dactylosus (Conus), Kien. Coq. viv., pl. xcvii, f. 2.
= C. clavus, Linn., var. 81
Dalli (Conus), Stearns. Proc. Cal. Ac. N. S., v, p. 78, pl. 1, f. 1, ... 91
Danielli (Conus), Crosse. Guerin's Mag., 205, 1858.
= C. pictus, Reeve, ... 68
Daphne (Conus), Boivin. Jour. de Conch., 1864, pl. i, f. 7–8.
= C. conspersus, Reeve, var. 58
Daucus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 651, . 48
Daullei (Conus), Crosse. Rev. Zool., 1858, pl. 2, f. 2, p. 119.
= C. consors, Sowb. 52
Dealbatus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 117.
= C. Californicus, Hinds, ... 18
Deburghiæ (Conus), Sowb. Thes. Conch., No. 7, f. 6, 7.
= C. nocturnus, Hwass, var. 8
Decrepitus (Conus), Kien. Coq. viv., p. 265, pl. xcix, f. 4.
= C. cocceus, Reeve, ... 70
Delessertianus (Conus), Recluz. Mag. de Zool., 1843, pl. 72, 33
Dendroconus, Swainson. Malacol., 311, 1840, ... 16
Deshayesii (Conus), Reeve. Proc. Zool. Soc., 1843, p. 168.
= C cervus, Lam., var. 87
Desidiosus, (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 119.
= C. mercator, Linn., var. 55
Diadema (Conus), Sowb. Proc. Zool. Soc., 1834, p. 19.
= C. brunneus, Gray, ... 28
Dianthus (Conus), Sowb. Proc. Zool. Soc., 1882, p. 118, pl. v, f. 4, ... 27
Dibaphus, Philippi. = Mitridæ, Manual, iv, p. 109.
Dilectus (Conus), Gould. Proc. Bost. Soc. N. H., iii, p. 172; Moll. Wilkes Exped., 287, f. 367, ... 67
Dilwynii (Conus), Reeve. Zool. Proc., 1843.
= C. Erythræensis, Beck.
Discrepans (Conus), Sowb. Conch. Ill., fig. 28.
= C. rhododendron, Couth. 86
Dispar (Conus), Sowb. Conch. Ill., f. 57.
= C. regularis, Sowb. 37
Distans (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 634, 47
Dolium (Conus), Boivin. Jour. de Conch., 1864, 36, pl. i, f. 3–4. = C. spectrum, Linn., var. 57
D'Orbignyi (Conus), Audouin, ... 75, 77
Duplicatus (Conus), Sowb. Thes. Index.
= C. Australis, Chemn.

Digitized by Google

Dupontii (Conus), Kien. Coq. viv., pl. lxi, f. 2.
= C. Africanus, Kiener, var. 84
Du Saveli (Conus), H. Ad. Proc. Zool. Soc., 1872, pl. 3, f. 17, p. 12. = C. circumcisus, Born, var. 87
Duvali (Conus), Born. Jour. de Conch., 1862, pl. 13, f. 3, p. 404. = C. pygmæus, Reeve, ... 62
Dux (Conus), Hwass. Enc. Meth. vers., i, pl. 2, p. 732.
= C. circumcisus, Born, ... 81

Eburneus (Conus), Hwass. Enc. Meth. vers., i, pl. 2, p. 640, 11
Echinulatus (Conus), Kien. Coq. viv., pl. cv, f. 2.
= C. verrucosus, Hwass, ... 78
Edentulus (Conus), Reeve.
= Dibaphus Philippii. Crosse, vol. iv, p. 109.
Elisæ (Conus), Kiener. Ic. Coq. viv., pl. 44, f. 1–1*a*, . 92
Elisæ (Conus), Reeve. Conch. Icon., f. 330 *b*.
= C. pennaceus, Born.
Elongatus (Conus), Chemn. Conch. Cab., x, t. 144, fig. a, f. J. K. 68
Elongatus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 170.
= C. oblitus, Reeve, ... 46
Elventinus (Conus), Ducl. Mag. de Zool., 1833, pl. 19.
? = C. verrucosus, Hwass, ... 78
Emaciatus (Conus), Reeve. Conch. Ic. Suppl., pl. v, f. 248, 44
Emarginatus (Conus), Reeve. Proc. Zool. Soc., 1843, . 37
Encaustus (Conus), Kien. Coq. viv., p. 54, pl. xiv, f. 2, . 21
Epaphus (Conus), Chiereg. Crosse, Guerin's Mag., 203, 1858. = C. Mediterraneus, Hwass.
Epaticus (Conus), Renier. Crosse, Guerin's Mag., 203, 1858. = C. Mediterraneus, Hwass.
Episcopus (Conus), Hwass. Encyc. Meth., 748.
= C. omaria, Hwass, ... 93
Epistomioides (Conus), Weink. Chemn., Ed. Nouv., pl. 57, f. 6, 7. = C. magus, Linn., var. 54
Epistomium (Conus), Meusch. Crosse, Rev. Zool., 205, 1858.
= C. vexillum, Gmel.
Epistomium (Conus), Reeve. Proc. Zool. Soc., 1843, p. 174.
= C. magus, Linn., var. 53
Eques (Conus), Brug. Dict., 97. = C. catus, Hwass, . 63
Ermineus (Conus), Born. Index Mus. Cæs.
= C. lithoglyphus, Meusch.
Erosus (Conus), Renier. Crosse, Guerin's Mag., 203, 1858.
= C. Mediterraneus, Hwass.
Erythræensis (Conus), Beck. Lam., Edit. ii, xi, 141, . 62
Eudoxus (Conus), Melvill. = C. marchionatus, Hinds, var. 10
Euetrios (Conus), Sowb. Proc. Zool. Soc., 1882, p. 120, pl. v, f. 6. = C. textile, var., Linn. 90

Digitized by Google

Evelynæ (Conus), Sowb. Proc. Zool. Soc., 1882, p. 117, pl. v, f. 2, ... 46
Exaratus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 171, . 74
Excavatus (Conus), Sowb. Thes. Conch. Suppl., 411, f. 616. = C. coffea, Gm. 42
Exiguus (Conus), Lam. Ann. Mus., No. 43. ? = C. varius, L., young.
Eximius (Conus), Reeve. Conch. Ic. Sup., pl. vi, f. 256. = C. fulgurans, Hwass (juv.), ... 32

Fabula (Conus), Sowb. Conch. Ill., f. 5. = C. scabriusculus, Chemn. 80
Fasciatus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 119. = C. bifasciatus, Sow. 32
Fasciatus (Conus), Kiener. Coq. viv., p. 311, pl. cix, f. 2. = C. lignarius, var. 51
Fasciatus (Conus), Mart. Sowb., Thes. Conch., t. 20, f. 487–489. = C. ochroleucus, Gmelin.
Fenellus (Conus), Chemn. Conch. Cab., xi, f. 1782, 1783. = C. magus, Linn. 53
Fenestrata (Oliva), Martyn. Univ. Conch. = C. (Conus) tendineus, Hwass.
Fergusoni (Conus), Sowb. Proc. Zool. Soc., 1875, pl. 15, f. 1, p. 145, ... 15
Ferrugatus (Conus), Sowb. Proc. Zool. Soc., 19, 1834. = C. cingulatus, var., Lam.
Ferrugineus (Conus), var., Brug. Reeve, Icon. = C. planorbis, Born.
Festivus (Conus), Chemn. xi, f. 1770, 1771. = C. pertusus, Hwass, ... 54
Figulinus (Conus), Linn. Syst. Nat. (Gm.), p. 3384, . . 16
Filamentosus (Conus), Reeve. Conch., Ic., pl. vi, Suppl., f. 260, ... 82
Flammeus (Conus), Lam. Edit. Desh., xi, 76, . . . 12
Flavescens (Conus), Gray. Sowb., Conch. Ill., f. 68, . . 36
Flavidus (Conus), Lam. An. sans Vert., vii, p. 468, . . 44
Floccatus (Conus), var. Kiener, t. 106, f. 3. = C. Julii, Liénard.
Floccatus (Conus), Sowb. Conch. Ill., f. 112, ... 86
Floridanus (Conus), Gabb. A. J. C., vol. iv, p. 195, pl. 15, f. 4, 1868, ... 38
Floridensis (Conus), Sowb. Proc. Zool. Soc., 1870, pl. 22, f. 11. = C. Floridanus, Gabb, ... 38
Floridulus (Conus), Ad. and Reeve. Moll. Voy. Sam., p. 18, pl. 5, f. 9. = C. voluminalis, Hinds, var. . . . 35
Floridus (Conus), Sowb. Thes. Conch., Sp. 345, x. = C. tulipa, Linn. 88

Digitized by Google

Fluctifer (Conus), Dillw. Desc. Cat., 1, 382.
= C. Prometheus, Hwass.
Fortis (Conus), Renier. Crosse, Guerin's Mag., 204, 1858.
= C. Mediterraneus, Hwass.
Franciscanus (Monachus), Chemn. Conch., ii, pl. 142, f. 1319, 1320. = Conus cinereus, Hwass.
Franciscanus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 698. = C. Mediterraneus, Hwass, ... 66
Frauenfeldi (Conus), Crosse. Jour. de Conch., 1865, pl. 10, f. 1, 1*a*. = C. magus, Linn., var. 53
Frigidus (Conus), Reeve. Conch. Ic., i, Supp., pl. iii, f. 284, 14
Fucatus (Conus), Reeve. Conch. Ic. Suppl., pl. vii, f. 271, 69
Fulgetrum (Conus), Sowb. Conch. Ill., fig. 32, Proc. Zool. Soc., 1841. = C. miliaris, Hwass, ... 22
Fulgurans (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 687, ... 32
Fulmen (Conus), Reeve. Proc. Zool. Soc., 1843, . . 65
Fumigatus (Conus), Hwass. Enc. Meth. vers., i, pl. 2, p. 704. = C. coffea, Gmel.
Fulmineus (Conus), Gmel. Syst. Nat., 3388.
? = C. fulgurans, Hwass.
Fulvocinctus (Conus), Crosse. Jour. Conch., 1872, p. 214; 1873, p. 248, pl. xi, f. 5, ... 52
Furvus (Conus), Reeve. Proc. Zool. Soc., 1843.
= C. lignarius, var. 51
Fuscatus (Conus), Lam. An. sans Vert., vii, 446.
= C. imperialis, Linn., var. 9
Fusiformis (Conus), Lam. An. sans Vert., Edit. Desh., xi, 92, ... 93
Fusiformis (Conus), Pease. Proc. Zool. Soc., 1860, p. 398.
= C. parvus, Pease. A. J. C., iv, p. 126, 1868, . . 85
Fustigatus (Conus), Hwass. Encyc. Meth., t. 320, f. 1.
= C. pulicarius, Hwass, ... 19
Fusus (Conus), Gmel. Syst. Nat., 3390.
= C. granulatus, Linn. 82

Gabrieli (Conus), Kien. Coq. viv., p. 315, pl. lxxiv, f. 4.
= C. cinereus, Hwass, ... 58
Geminus (Conus), Bolt. Mus. Crosse, Rev. Zool., 205, 1858.
= C. tæniatus, Hwass.
Gemmulatus (Conus), Sowb. Proc. Zool. Soc., 1870, p. 257, pl. xxii, f. 8. = C. Orbignyi, Aud. 75
Generalis (Conus), Linn. Syst. Nat., p. 1166, . . . 34
Genuanus (Conus), Linn. Syst. Nat. (Gmelin.). p. 3381, . 15
Geographus (Conus), Linn. Syst. Nat., Edit. xii, 1172, . 88
Geographus, var. (Conus), Sowb. Conch. Ill., f. 26.
= C. violaceus, Reeve.

Digitized by Google

Gilvus (Conus), Reeve. Conch. Ic. Suppl., pl. vi, f. 255.
= C. caffer, Krauss, ... 68
Gladiator (Conus), Brod. Proc. Zool. Soc., 1833, . . 28 28
Glans (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 725, . 79
Glaucus (Conus), Linn. Syst. Nat. (Gmel. Ed.), p. 3382, . 16
Gloria-maris (Conus), Hwass. Encyc. Meth., 752, t. 347, f. 7. 89
Gloynei (Conus), Sowb. Proc. Zool. Soc., 1881, p. 637, pl. lvi, f. 5, ... 44
Gosavia, Stoliczka. Sitz. Wien. Ac., lii, 1865.
= Volutidæ, Manual, iv, 78.
Gracilis (Conus), Mawe. Sowb., Thes. Conch. Index.
= C. Timorensis, Hwass, ... 75
Gracilis (Conus), Sowb. Thes. Index.
= C. australis, Chemn.
Gracilis (Conus), Sowb. Proc. Zool. Soc., 1875, p. 125, pl. xxiv, f. 6. = C. aculeiformis, Reeve.
Gradatulus (Conus), Weinkauff. Küster, 356, t. 66, f. 5, 38, 94
Gradatus (Conus), Gray. MSS., Brit. Mus., Sowb., Thes. Index. = C. scalaris, Val.
Granarius (Conus), Kien. Coq., viv., p. 215, pl. xcviii, f. 1.
= C. archon, Brod., var. 27
Grandis (Conus), Sowb. Index, Thes. Conch.
= C. spurius, Gm.
Granifer (Conus), Reeve. Conch. Ic. Sup., pl. vii, f. 272, . 74
Granulatus (Conus, Linn. Syst. Nat., Edit. xii, 1270, . 81
Granulosus (Conus), Bolt. Crosse, Rev. Zool., 205, 1858.
= C. varius, Linn.
Grayi (Conus), Reeve. Proc. Zool. Soc., 1843, p. 179, . 84
Griseus (Conus), Kien. Coq. viv., p. 114, pl. lxiii, f. 2.
= C. ambiguus, Reeve, ... 13
Grossi (Conus), Marav. Atti della Soc. Ital. des Sc. Nat.
= C. Mediterraneus, Hwass.
Gruneri (Conus), Reeve. Proc. Zool. Soc., 1843, p. 175.
= C. literatus, Linn. 10
Gubbæ (Conus), Kien. Coq. viv., pl. civ, f. 1.
= C. radiatus, Gmel., var. 60
Gubernator (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 727, pl. 340, f. 4–6, ... 86
Guestieri (Conus), Lorois. Jour. Conch., 1860, t. viii, pl. 12, f. 5, p. 329, ... 35
Guinaicus (Conus), Hwass. Enc. Meth. vers., 1, pt. 2, p. 697, 65
Guttatus (Conus), Kien. Coq. viv., p. 259, pl. cv, f. 4.
= C. Africanus, Kiener, ... 84

Hamilli (Conus), Crosse. Guerin's Mag. Zool., 205, 1858.
= C. Erythræensis, Beck.

Digitized by Google

Hanleyi (Conus), Sowb. Thes. Conch., 160, figs. 399, 400.
= C. puncticulatus, Hwass, ... 62
Hebræus (Conus), Linn. Syst. Nat., Ed. x, p. 715, . . 20
Henoquei (Conus), Bernardi. Jour. Conch., 1860, viii, pl. 13, f. 4, p. 380. ? = C. vittatus, var., Orion, . . . 43
Hepaticus (Conus), Kien. Ic. Coq. viv., pl. 97, f. 3, . . 47
Herillus (Conus), Chiereg. Crosse, Guerin's Mag., 204, 1858. = C. Mediterraneus, Hwass.
Hermes, Montfort. Conch. Syst., ii, 398, 1810.
= Genus of Conidæ, H. and A. Adams, ... 71, 79
Hieroglyphicus (Conus), Ducl. Mag. de Zool., 1833, pl. 23, 85
Hieroglyphicus, var. (Conus), Kien. Ic. Coq. viv., pl. 103, f. 3. = C. lugubris, Reeve.
Hwassii (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 118.
= C. varius, Linn. 25
Hyæna (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 656, pl. 327, f. 5 and 7, ... 65
Hyæna (Conus), Reeve. Icon. Suppl., 275.
= C. mutabilis, Chemn. 40
Hyæna (Conus), Reeve (not Hwass). Conch. Icon., f. 133.
= C. punctatus, Chemn.
Hybridus (Conus), Kien. Coq. viv., p. 256, pl. lxxxiii, f. 1.
= C. Mediterraneus, Hwass, ... 66

Ignobilis (Conus), Oliv. Zool. Adriat., 133.
= C. Mediterraneus, Hwass.
Imperialis (Conus), Linn. Syst. Nat. (Gm)., p. 3374, . 9
Inæqualis (Conus), Reeve. Conch. Ic. Suppl., vii, f. 270.
= C. corallinus, Kien., var. 67
Incarnatus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 174.
= C. coffea, Gm. 42
Incurvus (Conus), Kien. Iconog., t. 97, f. 4.
= C. regularis, Brod. 37
Indicus (Conus), Chemn. Conch. Cab., x, f. 1295.
= C. magus, Linn. 53
Induratus (Conus), Reeve. Conch. Ic. Suppl., pl. vii, f. 268.
= C. Erythræensis, Beck, ... 62
Inflatus (Conus), Kien. Coq. viv., pl. 71, f. 3.
= C. Lamarcki, Kien. 57
Inflatus (Conus), Sowb. Conch. Ill., fig. 41.
? = C. conspersus, Reeve. Sowb., Thes., f. 463, 464, . 58
Informis (Conus), Dillw. Desc. Cat., i, 431.
? = C. simplex, Sowb. 54
Informis (Conus), Hwass. Enc. Meth. vers., pt. ii, p. 699.
Unidentified.
Informis (Conus), Reeve (not Hwass). Conch. Icon., f. 24.
= C. simplex, Sowb.

Digitized by Google

Infrenatus (Conus), Reeve. Conch. Ic., i, Suppl., pl. iii, f. 285. 56
Innexus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 118.
= C. consors, Sowb. 52
Inquinatus, Reeve. Conch. Ic. Suppl., v, f. 251.
= C. pertusus, Hwass, ... 54
Inscriptus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 171, 61
Insculptus (Conus), Kien. Ic. Coq. viv., pl. 99, f. 2.
= C. aculeiformis, Reeve, ... 75
Insignis (Conus), Sowb. Conch. Ill., f. 17.
= C. acuminatus, Hwass. 31
Insularis (Conus), Gmel. Syst. Nat., 3389, . . . 93
Intermedius (Conus), Reeve. Proc. Zool. Soc., 1843, p. 169.
= C. geographus, Linn., var. Mappa, ... 88
Interruptus (Conus), Brod. and Sowb. Zoo. Jour., iv, p. 379,
1829, ... 63
Interruptus (Conus), Mawe. Conch., 1828.
= C. varius, Linn. 25
Iodostoma (Conus), Reeve. Proc. Zool. Soc., 1843, p. 170, 60
Irregularis (Conus), Sowb. Thes. Conch., f. 418, 419.
= C. olivaceus, Kien., var. 56
Istriensis (Conus), Chiereg. Crosse, Guerin's Mag., 204,
1858. = C. Mediterraneus, Hwass.

Jamaicensis (Conus), Hwass. Encyc. Meth., t. 343, f. 7.
? = var. C. Mediterraneus, Hwass, ... 66
Janus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 670, pl.
336, f. 5, 6, ... 61
Japonicus (Conus), Brug. Encyc. Meth., t. 330, f. 3.
? = C. Largillierti, Kiener.
Japonicus (Conus), Brug. Sowb., Thes. Conch., 110.
= C. Largillierti, Kiener, ... 36
Jaspideus (Conus), Kien. Ic. Coq. viv., pl. 55, f. 2.
= C. pictus, Reeve, ... 68
Jaspideus (Conus), Gmel. Syst. Nat., 3387, . . . 93
Jaspis (Conus), Salis. Reise, 363.
= C. Mediterraneus, Hwass.
Jickelii (Conus), Weink. Küster, 206, t. 32, f. 11, 12, . 61
Jukesii (Conus), Reeve. Conch. Ic., i, Suppl., pl. ii, fig. 278.
= C. anemone, Lam. 70
Julii (Conus), Lienard. Jour. de Conch., 1870, p. 304; 1871,
pl. 1, f. 6, ... 87

Keatii (Conus), Sowb. Thes. Conch., 298, fig. 479.
= C. inscriptus, Reeve, ... 61
Kieneri (Conus), Crosse. Guerin's Mag., 204, 1858.
= C. cocceus, Reeve.
Kieneri (Conus), Reeve. Conch. Ic., pl. ix, Sup., f. 282, . 71

Digitized by Google

Kobelti (Conus) Löbbecke. Jahr. Deutsch. Mal. Gesell., ix, p. 189, t. 4, f. 4, 5, 1882, ... 52

Lachrymosus (Conus), Reeve. Conch. Ic. Sup., vi, f. 258, 69
Lacinulatus (Conus), Kien. Coq. viv., p. 312, pl. cviii, f. 2.
= C. lithoglyphus, Meusch. 49
Lacteus (Conus), Lamk. An. sans Vert., vii, 481.
= C. spectrum, Linn., var.
Lacteus (Conus), Lam. Sowb., Thes. Conch , f. 473.
= C. radiatus, Gmel.
Lacteus (Conus), Reeve. Proc. Zool. Soc., 1843.
= C. spectrum, Linn. 57
Lætus (Conus), Gmel. Syst. Nat., 3391.
= C. granulatus, Linn.
Lævigatus (Conus), pars., Sowb. Thes. Conch., f. 207.
= C. vexillum, Gmel. 39
Lævigatus (Conus), Sowb. Thes. Conch., 149, 150.
= C. nemocanus, Hwass, ... 39
Lævis (Conus), Crosse. Guerin's Mag. Zool., 205, 1858.
For C. lævigatus, Sowb., not Defrance (fossil).
Lævis (Conus), Mart. Conch. Cab., ii, t. 52, f. 572.
= C. tendineus, Hwass.
Lamarckii (Conus), Kien. Coq. viv., p. 240, pl. lxxxiii. f. 4, 56
Lamberti (Conus), Sowb. Jour. de Conch., 1877, p. 71, pl. i, f. 1 and pl. ii, f. 7, ... 28
Lamellosus (Conus), Brug. Dict., No. 36, ... 93
Lapidus (Conus), Chemn. Conch. Cab.
= Conus zonatus, Hwass.
Largilliertii (Conus), Kien. Icon. Coq. viv., pl. 98, f. 3, . 36
Laterculatus (Conus), Sowb. Proc. Zool. Soc., 1870, p. 255, pl. xxii, f. 3. = C. australis, Chemn. 73
Latifasciatus (Conus), Sowb. Thes. Conch., 304, fig. 485.
= C. Kieneri, Reeve, ... 71
Lautus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 179, . 68
Legatus (Conus), Lam. An. sans Vert., vii, p. 523.
= C. canonicus, Hwass, var. 90
Lemniscatus (Conus), Reeve. Conch. Ic. Suppl., pl. v, f. 246, 36
Lentiginosus (Conus), Reeve. Zool. Proc., 1843.
= C. emarginatus, Reeve, var. 37
Leoninus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 683, pl. 334, f. 5, 6. = C. Proteus, Hwass, ... 12
Leoninus minutus (Conus), Chemn. Weinkauff, Cat. No. 212. = C. Erythræensis, Beck.
Leopardus (Conus), Dillw. Desc. Cat., i, 364.
= C. Sumatrensis, Hwass.
Leopardus (Conus), Meusch. Sowb., Thes. Conch. Index, . 93

Digitized by Google

Leo scandens (Conus), Chemn. Conch., x, pl. 140, f. 1300.
? = C. inscriptus, Reeve.
Leptoconus, Swainson. Malacol, 312, 1840.
= Genus of Conidæ, H. and A. Adams, . . . 25, 29
Leucostictus (Conus), Gmel. Syst. Nat., 3388, . . . 25
Leucostictus (Conus), Gmelin. Crosse, Rev. Zool., 206, 1858. = C. nebulosus, Sol. 28
Lictor (Conus), Boivin. Jour. de Conch., 1864, 36, pl. i, figs. 1 and 2. = C. spectrum, Linn., var. . . . 57
Lienardi (Conus), Crosse and Berdardi. Jour. Conch., ix, p. 49, pl. i, f. 2, 1861, ... 60
Lignarius (Conus), Reeve. Proc. Zool. Soc., 1843, . . 57
Lineatus (Conus), Chemn. Conch. Cab., x, pl. 138, f. 1285, 50
Lineolatus (Conus), Valen. Voy. Humboldt, Zool., 337.
= C. princeps, Linn. 29
Liratus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 181.
= C. plumbeus, Reeve, ... 26
Lischkeanus (Conus), Weink. Chemn. Ed. Nouv., pl. 36, f. 2, 3, 41
Listeri (Conus), Renier. Crosse, Guerin's Mag., 204, 1858.
= C. Mediterraneus, Hwass.
Literatus (Conus), Linn. Syst. Nat. (Gm.), p. 3375, . . 10
Lithoconus, Mörch. Yoldi, Cat., 66, 1853, . . . 10, 43
Lithoglyphus (Conus), Meuschen. Enc. Meth. ver., i, p. 2, p. 692, ... 48
Lividus (Conus), Chemn. Conch. Cab., xi, 60, t. 183, f. 1776, 1777. = C. cinereus, Hwass.
Lividus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 630, . 45
Lividus (Conus), var. Sowb. Reeve, Icon., sp. 286.
= C. mus, Hwass, var. roseus.
Lizardensis (Conus), Crosse. Jour. de Conch., 1865, pl. 9, f. 5. = C. Borneensis, Ad. and Reeve, ... 78
Loebbeckeanus (Conus), Weink. Chemn. Ed. Nouv., pl. 36, f. 3, 4. = C. Chenui, Crosse, ... 50
Lombei (Conus), Sowb. Proc. Zool. Soc., 1881, p. 637, pl. lvi, f. 6, ... 44
Longurionis (Conus), Kiener. Coq. viv., p. 308, pl. xcii, f. 6.
= C. aculeiformis, Reeve, ... 75
Lorenzianus (Conus), Chemnitz. Conch. Cab., f. 1754, 1755; Sowerby, Thes. Conch., f. 430, ... 35
Lorenzianus (Conus), Chemn. Sowerby, Thes. Conch., f. 217. = C. flammeus, Lam. 12, 94
Lorenzianus (Conus), Reeve. Conch. Icon., f. 152.
= C. virgatus, Reeve, ... 35
Loroisi (Conus), Kien. Coq. viv., p. 91, pl. lxv, f. 1.
= C. figulinus, Linn., var. 16
Loveni (Conus), Krauss. Südafrikan. Moll., p. 131, t. vi, f. 25. = C. Lamarcki, Kien. 56

Digitized by Google

Lubeckianus (Conus), Bernardi. Jour. Conch., t. ix, p. 169.
= C. Magellanicus, Hwass, var. 27
Lucidus (Conus), Mawe. Conch., 90, ... 91
Luctiferus (Conus), Reeve. Weinkauff, Cat. No. 88.
= C. luctificus, Reeve, ... 31
Luctificus (Conus), Reeve. Conch. Ic., i, Supp., pl. ii, f. 280, 31
Lugubris (Conus), Reeve. Conch. Ic. Supp., pl. ix, f. 279, 85
Luridus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 118.
= C. olivaceus, Kiener, ... 56
Luteus (Conus), Brod. Proc. Zool. Soc., 1833, . . . 79
Luteus (Conus), Quoy. Voy. Astrol., t. 53, f. 23, 24, . 94
Luzonicus (Conus), Sowb. Conch. Ill., fig. 91.
= C. purpurascens, Brod. 65
Lynceus (Conus), Solander. Sowb., Thes. Conch., f. 469.
= C. nisus, Chemn.

Macaræ (Conus), Bernardi. Jour. Conch., t. vi, pl. ii, f. 2, p. 56, 1857, ... 34
Macei (Conus), Crosse. Jour. de Conch., 1865, pl. 10, f. 5, 61
Macleayanus (Conus), F. Woods. Proc. Roy. Soc. Tasm., 1876, p. 134. = C. rutilus, Menke, ... 24
Maculatus (Conus), Sowb. Weinkauff, Cat. No. 245.
= C. anemone, Lam. 70
Maculiferus (Conus), Sowb. Conch. Ill., f. 23, . . . 21
Maculosus (Conus), Sowb. Conch. Ill., f. 3.
= C. anemone, Lam.
Madagascariensis (Conus), Sowb. Thes. Conch., fig. 582, No. 371. = C. textile, Linn., var. 90
Madurensis (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 709, ... 66
Magdalænæ (Conus), Kiener. Coq. viv., 293, t. 169, f. 4.
= C. floccatus, Sowb. 87
Magellanicus (Conus), Hwass. Brug., Enc. Meth., Conus, No. 31, pl. 322, f. 3, ... 26
Magnificus (Conus), Reeve. Proc. Zool. Soc., 1843.
= C. omaria, Hwass. 93
Magus (Conus), Linn. Syst. Nat., p. 1171, ... 53
Mahogani (Conus), Reeve. Proc. Zool. Soc., 1843, p. 169.
= C. interruptus, Brod. 63
Malaccanus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 645, pl. 325, ... 33
Maldivus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 644, 34
Maltzanianus (Conus), Weink. Chemn., Ed. Nouv., pl. 32, f. 3–6. = C. flavidus, Lam. 44
Mamillaris (Conus), Green. Trans. Albany Inst., i, p. 123, pl. 3, f. 5–6, ... 94

Digitized by Google

Mappa (Conus), Crosse. Guerin's Mag. Zool., 205, 1858.
= C. geographus, Linn., var. 88
Marchionatus (Conus), Hinds. Ann. Mag. N. H., 1843, p. 256, 9
Marmorata (Papyrus), Chemn. Reeve, Icon. Conus, f. 58.
= Conus varius, Linn.
Marmoreus (Conus), Linn. Syst. Nat. (Gmelin), 3374, . 7
Martinianus (Conus), Reeve. Conch. Ic., i, No. 217.
= C. radiatus, Gm. 60
Masoni (Conus), G. and H. Nevill. Jour. As. Soc. Beng. (N. S.), xliii, pt. 2, p. 22, 1874.
? = C. characteristicus, Chemn. 13
Mauritianus (Conus), Hwass. Enc. Meth., pl. 330, f. 9.
= C. puncticulatus, Hwass.
Mauritianus (Conus), Lam. Kiener, Iconog., t. 69, f. 2.
? = C. puncticulatus, Hwass.
Maurus (Conus), Gray. App. King's Australia, 486, 1827, 94
Mazei (Conus), Desh. Jour. Conch., 1874, p. 54, pl. 1, f. 1, 39
Mediterraneus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 701, ... 66
Melvilli (Conus), Sowb. Proc. Zool. Soc., 1878, p. 795, pl. xlviii, f. 1, ... 71
Melancholicus (Conus), Lam. An. s. Vert., vii, p. 513, . 86
Memnonitarum coronatus (Conus) Chemn. Conch. Cab.
= C. distans, Hwass.
Mercator (Conus), Linn. Syst. Nat., Edit. xii, 1169, . 55
Mesokatharos, Melvill. = C. arenatus, var. . . . 18
Metcalfei (Conus), Angas. Proc. Zool. Soc., 1877, p. 173, pl. xxvi, f. 13. = C. Angasi, Tryon, ... 63
Metcalfei (Conus), Reeve. Proc. Zool. Soc., 1843, p. 171.
= C. magus, Linn., var. 53
Mighelsi (Conus), Kien. Icon. Coq. viv., pl. ciii, f. 1.
= C. musicus, Hwass, ... 11
Miles (Conus), Linn. Syst. Nat., p. 1167, . . . 40
Miliaris (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 629, 21
Millepunctatus (Conus), Chemn. Crosse, Mag. Zool., 205, 1858. = C. puncticulatus, Hwass.
Millepunctatus (Conus), Lam. An. s. Vert., vii, p. 461.
= C. literatus, Linn., var. 10
Mindanus (Conus), Hwass. Enc. Meth. vers., i, pt. ii, p. 711.
= C. verrucosus, Hwass, ... 78
Minimus (Conus, Auct., not Linn. = C. miliaris, Hwass, 22
Minimus (Conus), Gm. (non Linn.). Syst. Nat., p. 3382.
= C. achatinus, Chemn.
Minutus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 179, . 37
Mirmillo (Conus), Crosse. Jour. de Conch., 1865, pl. 9, f. 2.
= C. flavidus, Lam. 44
Miser (Conus), Boivin. Jour. de Conch., xii, 39, t. 1, f. 9, 1864, 55

Digitized by Google

Mitratus (Conus), Hwass. Enc. Meth. vers., i, pt. ii, p. 632, 83
Modestus (Conus), Sowb. Conch. Ill., f. 19.
= C. fulmen, Reeve, ... 65
Molluccensis (Conus), Chemn. Conch., xi, pl. 183, f. 1780, 1781, ... 26
Monachus (Conus), Linn. Syst. Nat , ii, p. 1168, . . 64
Monile (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 646, . 34
Monilifer (Conus), Brod. Proc. Zool. Soc., 53, 1833.
= C. interruptus, Brod. 63
Monstrosus (Conus), Chemn. Conch. Cab., 1290, 1291.
= C. araneosus, Hwass, Monstr.
Moreleti (Conus), Crosse. Rev. Zool., 205, 1858.
= C. oblitus, Reeve, ... 46
Moussoni (Conus), Crosse. Jour. de Conch., xiii, 1865, p. 299, pl. x, f. 3, ... 46
Mozambicus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 696. = C elongata, Chemn. 68
Mucronatus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 172, 72
Multicatenatus (Conus), Sowb. Proc. Zool. Soc., 1865, p. 519, pl. xxxii, f. 10, 11. = C. aplustre, Reeve, . . 68
Multilineatus (Conus), Sowb. Proc. Zool. Soc., 1875, p. 126, pl. xxiv, f. 5, ... 52
Muriculatus (Conus), Sowb. Conch. Ill., f. 1, . . . 26
Mus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 630, . 19
Muscosus (Conus), Lam. Edit. Desh., xi, 79.
= C. characteristicus, Chemn. 13
Musicus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 629, 11
Musivus (Conus), Brod. Zool. Proc., No. 54, 1833.
= C. legatus, Lam.
Mustelinus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 654, pl. 327, f. 6. = C. capitaneus, var. Hwass, . . 40
Mutabilis (Conus), Chemn. Conch. Cab., xi, p. 52, pl. 182, f. 1758, 1759, ... 40

Nanus (Conus), Brod, Proc. Zool. Soc., 1833, p. 53.
= C. Ceylonensis, Hwass, var. 24
Narcissus (Conus), Lam. An. sans Vert., vii, p. 492, . . 48
Natalis (Conus), Sowb. Thes. Conch., 267, figs. 292, 293, . 55
Nebulosus (Conus), Solander. Brug., Enc. Meth. vers., ii, pt. i, p. 607, ... 28
Neglectus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 117.
= C. purpurascens, Brod. 64
Neglectus (Conus), Pease. Proc. Zool. Soc., 1860, p. 398; Am. Jour. Conch., v. 87. = C. Peasei, Brazier, . . 44
Nemocanus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 712. = C. Sumatrensis, Hwass, var. 39

Digitized by Google

Neptunoides (Conus), E. A. Smith. Proc. Zool. Soc., 1880, p. 479, pl. xlviii, f. 2, ... 72
Neptunus (Conus), Kien. Coq. viv., p. 133, t. 99, f. 5. = C. Schech, Jick., Jahr. Mal. Ges., 2, p. 46, . . . 31
Neptunus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 13, . 72
Nicobaricus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 612. = C. araneosus, Hwass, var. 9
Niger (Conus), Jay. Catalogue 100, 1839, ... 93
Nigrescens (Conus), Sowb. Thes. Conch., Suppl., 413, f. 618; Proc. Zool. Soc., 1859, p. 429, pl. xlix, fig. 2. = C. marmoreus, Linn.
Nigropunctatus (Conus), Sowb. Thes. Conch., 333, f. 342. = C. catus, Hwass, var. 64
Nimbosus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 732, 82
Nisus (Conus), Chemn. Conch. Cab., xi, f. 1784, 5, . . 59
Nisus (Conus), Kien. Ic. Coq. viv., pl. 59, f. 4 (not Chemn.). = C. Kieneri, Reeve.
Nitidus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 180, . 67
Niveus (Conus), Gm. Syst. Nat., 3392. = C. marmoreus, Linn.
Nivifer (Conus), Brod. Zool. Proc., 1833. = C. venulatus, Hwass, var. 15
Nivosus (Conus), Lam. An. sans Vert., xi, 73. = C. venulatus, Hwass, ... 14
Nobilis (Conus), Linn. (Gmelin) Syst. Nat., 3381, . . 30
Nocturnus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 611, 8
Nodiferus (Conus), Kien. Coq. viv., p. 228, pl. c, f. 4. = C. verrucosus, Hwass, ... 78
Nodulosus (Conus), Sowb. Thes. Conch. Supp., 429, f. 635, 31
Noumeensis, var. (Conus), Crosse. Jour. Conch., 1872, p. 155. = C. suffusus, var., Sowb. 29
Novæ-Hollandiæ (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 119. = C. anemone, Lam. 70
Nubecula (Conus), Gmel. Syst. Nat., 3396. Unrecognized.
Nubecula, Klein. Ostrac., 76, 1753, ... 85
Nucleus (Conus), Reeve. Conch. Ic., i, pl. iii, Supp., f. 280, 79
Nussatella (Conus), Linn. Syst. Nat., 1170, . . . 80
Nux (Conus), Brod. Proc. Zool. Soc., 1833. = C. Ceylonensis, Hwass. 23

Obesus (Conus), Hwass. Enc. Meth vers., i, pt. 2, p. 623, 18
Oblitus (Conus), Reeve. Conch. Icon., Crit. Anal., 1749, 45
Obscurus (Conus), Humph. Mss. Reeve, Icon. sp., 82. = C. violaceus, Reeve, ... 88
Obtusus (Conus), Kien. Coq. viv., p. 317, pl. cix, f. 3. = C. Africanus, Kiener, ... 84
Ocellatus (Conus), Gmel. Syst. Nat., 3387, . . . 94

Digitized by Google

Ochraceus (Conus), Gmelin. Weinkauff, Cat. Conus, No. 203. = C. ochroleucus, Gmelin.
Ochraceus (Conus), Lam. An. s. Vert., Edit. Desh., xi, 67. = C. Proteus (discolored), Hwass, ... 12
Ochroleucus (Cocus), Gmelin. Syst. Nat., 3391, . . 60
Oculatus (Conus), Gm. Syst. Nat., 3387, ... 48
Olivaceus (Conus), Kien. Coq. viv., p. 359, pl. cxi, f. 3. = C. Taslei, Kien. 55
Olivaceus (Conus), Salis. Reise, 363. = C. Mediterraneus, Hwass.
Oltmansianus (Conus), Van Lennep. Cat. Conus, 1876. = C. gradatulus, Weinkauff.
Omaicus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 714, pl. 339, f. 3, ... 16
Omaria (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 743, 92
Optabilis (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 116, 38
Orbignyi (Conus), Audouin. Mag. de Zool., Moll., pl. 20, 1830, ... 75, 77
Orbitatus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 170. = C. mucronatus, Reeve, var. 73
Orion (Conus), Brod. Proc. Zool. Soc., 1833. = C. vittatus, Lam., var. 43
Orleanus (Conus), Bolt. Mus. = C. lithoglyphus, Meusch.

Pagodus (Conus), Chemn. Leçons Elem., pl. 12, f. 2. = C. cancellatus, Lam.
Pallens (Conus), Chiereg. Crosse, Guerin's Mag., 204, 1858. = C. Mediterraneus, Hwass.
Panniculus (Conus), Lam. An. s. Vert., vii, p. 521. = C. abbas, Hwass, ... 92
Papalis (Conus), Weink. Cat. No. 280, ... 78
Papilionaceus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 665. = C. Proteus, Hwass, var. 12
Papillaris (Conus), Ad. and Reeve. Voy. of Samarang., Moll., p. 17, pl. v., f. 7 *a–b*, ... 38
Papillosus (Conus), Kien. Ic. Coq. viv., pl. 72, f. 4. = C. puncticulatus, Hwass, ... 62
Parius (Conus), Reeve. Proc. Zool. Soc., 1843, p. 175. = C. radiatus, Gmel., var. 60
Parvus (Conus), Pease. Am. Jour. Conch., iv, p. 126, 1868. = C. atramentosus, Reeve, ... 85
Pastinaca (Conus), Kiener. Coq. viv., pl. 26, f. 2 (non (Lam.). = C. daucus, Hwass, ... 48
Pastinaca (Conus), Lam. An. s. Vert., vii, p. 469; E. A. Smith, Zool. Proc., 731, 1878. ? = C. virgo, Linn. . 34

Digitized by Google

Patricius (Conus), Hinds. Ann. Mag. N. H., 1843, p. 256.
= C. pyriformis, Reeve, ... 17
Paulinæ (Conus), Kien. Coq. viv., p. 314, pl. cviii, f. 3.
= C. characteristicus, Chemn. 13
Paulucciæ (Conus), Sowb. Proc. Zool. Soc., 1876, p. 752,
pl. lxxv, f. 3, ... 89
Pauperculus (Conus), Sowb. Conch. Ill., f. 78, ... 68
Pazii (Conus), Bernardi. Jour. Conch., t. vi, pl. ii, f. 1–2.
p. 385. = C. classiarius, Hwass, var. 42
Pealii (Conus), Green. Trans. Alb. Inst., i, p. 123, pl. 3, f. 3, 36
Peasei (Conus), Brazier. Pro. Linn. Soc. N. S. W., i, 288.
= C. flavidus, Lam., var. 44
Pelagicus (Conus), Brocchi. Conch. foss., ii, 289, t. 2, f. 9.
= C. Mediterraneus, Hwass.
Pellis-hyæna (Conus), Chemn. Conch. Cab., xi, p. 49, pl.
181, f. 1750, 1751. = C. mutabilis, Chemn.
Pellis-hyæna (Conus), Reeve (not Chemnitz). Icon. Sp.,
133. = C. punctatus, Chemn.
Pennaceus (Conus), Born. Test. Mus. Cæs., t. 7, f. 14, . 93
Peplum (Conus), Chemn. Conch. Cab., x, t. 144 *c*.
= C. araneosus, Hwass, ... 8
Perplexus (Conus), Sowb. Thes. Conch., 157, figs. 324, 325.
= C. puncticulatus, Hwass, ... 62
Pertusus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p.
686, pl. 336, f. 2. 54
Petræus (Ammiralis), Chemn. Conch., x, pl. 140, f. 1298.
= Conus lithoglyphus, Meuschen.
Phasmoconus, Mörch. Yoldi Cat., 70, 1852.
= Chelyconus, Mörch, ... 52
Phegeus (Conus), Chiereg. Crosse, Guerin's Mag., 204,
1858. = C. Mediterraneus, Hwass.
Philippi (Conus), Kien. Coq. viv., p. 213, pl. xcviii, f. 2.
= C. tornatus, Brod. 63
Philippii (Dibaphus), Crosse. Rev. Zool., 1858, pl. 3, f. 1.
= Mitridæ, vol. iv.
Pica (Conus), Ad. and Reeve. Mol. Voy. Sam., p. 18, pl.
5, f. 10. = C. spectrum, Linn. 57
Pictus (Conus), Reeve. Proc. Zool. Soc., 1853, p. 169, . 68
Pigmentatus (Conus), Ad. and Reeve. Moll. Voy. Samar.,
p. 18, pl. 5, f. 11. = C. balteatus, Sow. . . . 21
Pionoconus, Mörch. H. and A. Adams, Genera.
= Chelyconus, Mörch, ... 52
Piperatus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 175.
= C. Erythræensis, Beck. 62
Planaxis (Conus), Desh. Moll. Ile Reunion, p. 134, pl. xiii,
f. 11, 12, ... 10

Digitized by Google

Planicostatus (Conus), Sowb. Conch. Ill., 1840.
= C. Orbignyi, Aud. 75
Planiliratus (Conus), Sowb. Proc. Zool. Soc., 1870, p. 255, pl. xxii, f. 1, ... 73
Planorbis (Conus), Born. Test. Mus. Cæs., t. 7, f. 13, . 50
Plumbeus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 178, 26
Politus (Conus), Bolten. Weinkauff, Conch. Cab., t. 64, f. 2, 3. = C. cinereus, Hwass, var. 59
Polyglotta (Conus), A. Ad. (ubi?). Weinkauff, Cat. 13.
= C. eburneus, Hwass, ... 11
Polyzonias (Conus), Gm. Syst. Nat., 3392.
= C. planorbis, Born.
Ponderosus (Conus), Beck. Sowb., Thes. Index.
= C. quercinus, Hwass, ... 17
Pontificalis (Conus), Lam. An. s. Vert., vii, p. 459, 24, 78
Portoricanus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 714. = C. testudinarius, Mart. 65
Præcellens (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 119.
= C. cancellatus, Lam. 75
Præfectus (Conus), Hwass. Encyc. Meth., 752.
= C. ochroleucus, Gmelin.
Præfectus (Vigiliarum), Mart. Conch., ii, pl. 59, f. 655.
= Conus centurio, Born.
Prælatus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 746.
= C. omaria, Hwass, ... 93
Prætextus (Conus), Reeve. Conch. Ic., i, Suppl., pl. ii, f. 277.
= C. encaustus, Kien. 21
Pretiosus (Conus), G. and H. Nevill. Jour. As. Soc. Beng. (U. S.), xliii, pt. 2, p. 22, ... 71
Prevosti (Conus), Sowb. Proc. Zool. Soc., 1881, p. 636, pl. lvi, f. 3, ... 91
Primula (Conus), Reeve. Conch. Ic. Sup., vi, f. 259, . 46
Princeps (Conus), Linn. Syst. Nat., p. 1167, ... 29
Proarchithalassus (Conus), Born. Test. Mus. Cæs.
= C. marmoreus, var. bandanus, Hwass.
Proarchithalassus (Conus), Mörch. Sowb., Thes. Conch. Index. = C. prælatus, Hwass.
Prometheus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 667, ... 15
Proteus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 682, 12
Proximus (Conus), Sowb. Proc. Zool. Soc., 1859, p. 429, pl. xlix, f. 1. = C. Moluccensis, Chemn. 26
Pryntanis (Conus), Sowb. Proc. Zool. Soc., 1882, p. 117, pl. v, f. 1, ... 46
Pseudomarmoreus (Conus), Desh. Jour. Conch., 1875, p. 223, pl. ix, f. 4. = C. marmoreus, Linn., var. . . . 8

Digitized by Google

Pseudo-Thomæ (Conus), Chemn. Conch. Cab., x, 25, f. 1282, 1283. = C. Proteus, Hwass.
Pulchellus (Conus), Sowb. (not Swain.). Proc. Zool. Soc., 1834. = C. varius, Linn. 25
Pulchellus (Conus), Swains. Zool. Ill., 1st ser., ii, pl. 65, . 49
Pulcher (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 117, . 74
Pulicarius (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 622, 19
Punctatus (Conus), Chemn. Conch. Cab., x, p. 36, pl. 139, f. 1294, ... 20
Puncticulis, Swainson. Malacol., 311, 1840.
= S. G. Conus, L., H. and A. Adams, ... 18
Puncticulatus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 704, ... 62
Puncturatus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 635, ... 83
Pupæformis (Conus), var. C. mitræformis, Sowb. Proc. Zool. Soc., 1870, p. 256, pl. xxii, f. 2. = C. mitratus, Hwass, . 83
Purpurascens (Conus), Brod. Proc. Zool. Soc., 1833, p. 54, 64
Purus (Conus), Pease. Proc. Zool. Soc., 1862, p. 279, . 94
Pusillus (Conus), Chemn. (non Lam.). Conch. Cab., ii, p. 65, pl. 183, f. 1788, 1789. = C. Ceylonensis, Hwass, var., 23
Pusillus (Conus), Gould. Otia Conch., 187; Bost. Jour., vi. = C. Ceylonensis. Hwass, ... 23
Pusilla (Conus). Pease (olim.). Zool. Proc., 516, 1865.
= C. parvus, Pease.
Pusio (Conus), Lam. An. sans Vert., vii, 499, . . . 93
Pusio (Conus), Lam. Sowb., Thes. Conch., f. 398.
= C. puncticulatus, Hwass, ... 62
Pustulatus (Conus), Kien. Coq. viv., pl. ci, f. 2.
= C. puncticulatus, Hwass, ... 62
Pustulosus (Conus), Kien. Sowb., Thes., No. 79.
= C. puncticulatus, Hwass.
Pygmæus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 179.
= C. puncticulatus, Hwass, ... 62
Pyramidalis (Conus), Kiener, t. 96, f. 2.
= Var. convolutus, Sowb.
Pyramidalis (Conus), Lam. Anim. sans Vert., vii, 577, . 89
Pyriformis (Conus), Reeve. Conch. Ic., i, pl. xiii, f. 70, 1843, 17
Pyrula (Conus), Brocchi. Conch. foss., ii, 289, t. 2, f. 8.
= C. Mediterraneus, Hwass.

Quadratomaculatus (Conus), Sowb. Thes. Conch. Sup., 431, f. 637, 638. = C. Erythræensis, Beck.
Quæstor (Conus), Lam. Edit. Desh., xi, 79.
= C. characteristicus, Chemn. 13
Quercinus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 681.
= C. figulinus, L., var. 17

Digitized by Google

Racemosus (Conus), Sowb. Zool. Proc., 1873, pl. 59, f. 11, p. 721, ... 92
Radiatus (Conus), Chemn. Mss. Reeve, Icon. Sp., 203. = C. scalptus, Reeve.
Radiatus (Conus), Gmel. Syst. Nat., 3386, ... 60
Ranunculus (Conus), Hwass. Encyc. Meth., t. 331, f. 1. = C. achatinus, Chemn.
Raphanus (Conus), Hwass. Encyc. Meth., i, 722, t. 341, f. 2. = C. magus, Linn. 53
Rarimaculatus (Conus), Sowb. Proc. Zool. Soc., 1870, p. 257, pl. xxii, f. 4. = C. Sieboldi, Reeve, ... 38
Rattus (Conus), Hwass. Dict., No. 89, ... 41
Ravus (Conus), Gould. Otia. Conch., 187; Bost. Jour., vi. = C. Californicus, Hinds.
Recluzianus (Conus), Bernardi. Jour. Conch., t. iv, p. 148, pl. 6, f. 6, 1853, ... 9
Reevei (Conus), Kien. Coq. viv., p. 115, pl. xliv, f. 2. = C. daucus, Hwass, ... 48
Reflectus (Conus), Sowb. Proc. Zool. Soc., 1876, p. 754, pl. lxxv, f. 6, ... 22
Regalitatus (Conus), Sowb. Proc. Zool. Soc., 1834. = C. purpurascens, Brod., var. 65
Regius (Conus), Chemn. Conch. Cab., x, 138, f. 1276. = C. princeps, Linn. 29
Regularis (Conus), Sowb. Conch. Ill., f. 45, . . . 37
Reticulatus (Conus), Martini. T. 56, f. 619, 620. = C. mercator, Linn.
Reticulatus (Conus), Sowb. Conch. Ill., f. 86. = C. lucidus, Mawe.
Retifer (Conus), Menke. Vezeichniss, 1443, . . . 89
Rhizoconus, Mörch. Yoldi Cat., 68, 1852. = S. G. Leptoconus, H. and A. Adams, . . 29, 39, 48
Rhododendron (Conus), Couth. Jay, Cat. Shells, 3d Ed., t. 7, f. 2, 3, 1839, ... 86
Rhombus, Montf. Conch. Syst., ii, 402, 1810. = Conus, Linn. 7
Rivularis (Conus), Reeve. Conch. Ic. Sup., pl. vi, f. 261. = C. bœticus, Reeve, var. 26
Robillardi (Conus), Bernardi. Jour. Conch., t. vii, p. 182, pl. 7. = C. vexillum, Gmel. 39
Rollandi (Conus), Bernardi. Jour. Conch., t. viii, p. 332, pl. 12, f. 4, 1860. = C. magus, Linn., var. . . . 53
Rollus, Montfort. Conch. Syst., ii, 395, 1810. = Nubecula, Klein.
Rosaceus (Conus), Chemn. xi, p. 52, t. 181, f. 1756, 1757, 56
Roseus (Conus), Kien. (not Lam.). Ic. Coq. viv., pl. 107, f. 4. = C. Kieneri, Reeve, ... 71

Digitized by Google

Roseus (Conus), Lam. An. s. Vert., vii, p. 458.
= C. mus, Hwass, var. 20
Roseo-tinctus (Conus), Sowb. Thes. Conch. Suppl., 405, f. 604. = C. rosaceus, Chemn. 56
Rossiteri (Conus), Brazier. Proc. Zool. Soc., 1870, p. 109, 69
Rubescens (Conus), Bonnet. Rev. Zool., 1864, p. 282, pl. 22, f. 6. = Var. C. cannonicus, Hwass, . . . 90
Rubiginosus (Conus), Hwass. Enc. Meth., 744.
= C. omaria, Hwass, ... 93
Rudis (Conus), Chemn. Conch. Cab., x, 90, t. 144, . . 54
Ruppellii (Conus), Reeve. Conch. Ic., i, Suppl., pl. ii, f. 273.
= C. classiarius, Hwass, juv. 41
Rusticus (Conus), part. Gmelin, Syst. Nat., 3383.
= C. cinereus, Hwass.
Rusticus (Conus), Poli. Test. Sicil., iii, 8, t. 45, f. 3–6.
= C. Mediterraneus, Hwass.
Rutilus (Conus), Menke. Moll. Nov. Holl., p. 27, No. 133, 24

Sagittatus (Conus), Sowb. Proc. Zool. Soc., 1865, p. 518, pl. xxxii, f. 8, 9. = C. lemniscatus, Reeve, . . . 36
Sanguineus (Conus), Kien. Coq. viv., p. 356, pl. cxi, f. 2.
= C. Archon, Brod. 27
Sanguinolentus (Conus), Quoy. Voy. Astrol., iii, 90, t. 20, f. 18; t. 21, f. 4. = C. lividus, Hwass, ... 45
Sanguinolentus (Conus), Reeve. Conch. Ic. Sup., pl. viii, f. 274. = C. virgatus, Reeve, var. 35
Sapphirostoma (Conus), Weinkauff. Cat. No. 207.
= C. Erythræensis, Beck, ... 62
Scaber (Conus), Kiener. Coq. viv., p. 351, pl. c, f. 1.
= C. miliaris, Hwass, ... 22
Scabriusculus (Conus), Chemn Conch., xi, t. clxxxii, f. 1768–9, ... 80
Scalaris (Conus), Valenc. Humb et Bonpl. Reise, 338, . 35
Scalaris (Conus), Val. Kiener, Iconog.
= C. arcuatus, Brod. 76
Scalptus (Conus), Reeve. Proc., Zool. Soc., 1843, p. 172, 18
Scheck (Conus), Jickeli. Jahrb. Mal. Gesell., ii, 46, . . 31
Scitulus (Conus), Reeve. Conch. Ic. Sup., pl. ix, f. 283.
= C. pictus, Reeve, ... 68
Scriptus (Conus), Sowb. Thes. Conch., 357, fig. 563.
= C. textile, Linn. 90
Secutor (Conus), Crosse. Jour. de Conch., 1865, 303, pl. 9, f. 33. = C. caffer, Krauss, ... 68
Selectus (Conus), A. Ad. Proc. Zool. Soc., 1855, p. 121, . 38
Semistriatus (Conus), Sowb. Weink. Cat., No. 60.
= C. semisulcatus, Sowb.

Digitized by Google

Semisulcatus (Conus), Sowb. Proc. Zool. Soc., 1870, p. 257, pl. xxii, f. 13, ... 79
Semivelatus (Conus), Sowb. Proc. Zool. Soc., 1882, p. 118, pl. v, f. 3, ... 41
Senator (Conus), Kien., Reeve, etc., not Linn.
= C. planorbis, Born, ... 50
Senator Conus), Linn. Syst. Nat., p. 1168. Undetermined.
Seychellensis (Conus), G. and H. Nevill. Jour. As. Soc. Beng. (n. s.), xliii, pt. 2, p. 22. 1874, ... 49
Siamensis (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 662,
= C. Proteus, Hwass, var. 12
Sieboldii (Conus), Reeve. Conch. Ic. Suppl., i, f. 269, 1848, 38
Signifer (Conus), Crosse. Jour. de Conch., 1865, 308, pl. 10, f. 6. = C. rosaceus, Chemn., var. 56
Simplex (Conus), Sowb. Thes. Conch., sp. 269, f. 199, . 54
Sindon (Conus), Reeve. Proc. Zool. Soc., 1843, p. 175, . 54
Sinensis (Conus), Kiener. Iconog., 143, t. 71, f. 1.
= C. cingulatus, Lam.
Sinensis (Conus), Gmel. Syst. Nat., 3394, ... 93
Sinensis (Conus), Sowb. Conch. Ill., f. 56.
= C. Sowerbyi, Reeve, ... 76
Smithi (Conus), Angas. Proc. Zool. Soc., 1877, p. 36, pl. v, f. 8, ... 24
Solandri (Conus), Brod. and Sowb. Zool. Jour., v, p. 50, t. 40, f. 4. = C. coccineus, Gm. 82
Solidus (Conus), Chemn. Sowb., Thes. Conch. Index,
= C. nebulosus, Sol. 28
Solidus (Conus), Sowb. Conch. Ill., f. 76.
= C. retifer, Menke.
Sophiæ (Conus), Brazier. Proc. Linn. Soc. N. S. W., vol. i, p. 7, ... 94
Sowerbyi (Conus), Reeve. Conch. Icon., f. 77 *a*, emend.
= C. undatus, Kien. 76
Speciosus (Conus), Sowb. Thes. Conch., 51, fig. 138, . 24
Speciosissimus (Conus), Reeve. Conch. Ic., i, Suppl., pl. ii, f. 274. = C. Magellanicus, Hwass, var. 27
Spectabilis (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 117.
= C. tenellus, Chemn. 81
Spectrum (Conus), Linn. Syst. Nat. (Gmel.), p. 3395, . 57
Spectrum album (Conus), Chemn. Con. Cab., x, pl. 140, f. 1304. = C. radiatus, Gmel., var., parius.
Spectrum Sumatræ (Conus), Chemn. Conch. Cab., x, 91, t. 144. = C. pica, Ad. and Reeve.
Sphacelatus (Conus), Sowb. Conch. Ill., f. 51.
= C. hebræus, Linn., var. 20
Spiculum (Conus), Reeve. Conch. Ic. Suppl., vii, f. 266, . 32

Digitized by Google

Spiroglossus (Conus), Desh. Moll. Ile Reunion, p. 135, pl. xiii, f. 13, 14. = C. generalis, Linn. 34
Splendidulus (Conus), Sowb. Conch. Ill., f. 53. = C. classiarius, Hwass, ... 41
Sponsalis (Conus), Chemn. Conch. Cab., xi, pl. 182, f. 1766, 1767. = C. Ceylonensis, Hwass, var. 23
Spurius (Conus), Gmelin. Syst. Nat., 3396. = C. Proteus, Hwass, ... 12
Stainforthii (Conus), Reeve. Conch. Ic., i, pl. 1, f. 1. = C. Moluccensis, Chemn. 26
Stearnsii (Conus), Conrad. Am. Jour. Conch., v, p. 104, pl. 10, f. 1, 1870. = C. Pealii, Green, ... 36
Stellatus (Conus), Kien. Coq. viv., p. 225, pl. xcix, f. 3. = C. omaria, Hwass, ... 93
Stephanoconus, Mörch. Yoldi Cat., 65, 1852. 25
Stercus-muscarum (Conus), Linn. Syst. Nat. (Gm.), p. 3385, ... 19
Stercutius (Conus), Chiereg. Crosse, Guerin's Mag., 204, 1858. = C. Mediterraneus, Hwass.
Sticticus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 117. = C. verrucosus, Hwass, ... 78
Stigmaticus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 119. = C. nisus, Chemn. 59
Stillatus (Conus), Reeve. Conch. Ic. Suppl., v, f. 247. = C. conspersus, Reeve, ... 58
Stramineus (Conus), Lam. An. s. Vert., vii, p. 481. = C. nisus, Chemn. 59
Straturatus (Conus), Sowb. Thes. Suppl. 408, fs. 609–610; Proc. Zool. Soc., 1865, p. 518, pl. xxxii, f. 14. = C. cinereus, Hwass, var. 58
Striatum (Textile), Chemn. Conch., x, pl. 141, f. 1311. = Conus retifer, Menke.
Striatus (Conus), Linn. Syst. Nat., Edit. xii, 1117, . . 85
Strigatus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 733, 73
Striolatus (Conus), Kien. Ic. Coq. viv., pl. 105, f. 1; Smith, Jour. Linn. Soc., xii, 535. = C. magus, Linn. . . 53
Strombus, Adanson. Hist. Nat., Senegal, 82, 1757. = Conus, Linn.
Subæqualis (Conus), Sowb. Proc. Zool. Soc., 1870, p. 257, pl. xxii, f. 5. = C. Sowerbyi, Reeve, ... 76
Subcarinatus (Conus), Sowb. Proc. Zool. Soc., 1865, p. 518, pl. xxxii, f. 12-13, ... 32
Submarginatus (Conus), Sowb. Proc. Zool. Soc., 1870, p. 255, pl. xxii, f. 6, ... 59
Substriatus (Conus), Link. Crosse, Rev. Zool., 206, 1858. = C. acuminatus, Hwass.
Subulatus (Conus), Kien. Ic. Coq. viv., pl. 70, f. 2, . . 71

Digitized by Google

Subulatus (Conus), Sowerby (not Kiener). Thes. Conch., f. 472. = C. spectrum, Linn. 57
Succinctus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 118, 13
Suffusus (Conus), Sowb. Proc. Zool. Soc., 1870, p. 255, pl. xxii, f. 9, ... 29
Sugillatus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 177. = C. lividus, Hwass, var. 45
Sulcatus (Conus), Hwass. Enc. Meth. vers., pt. 2, p. 618, . 73
Sulciferus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 116, 74
Sulphuratus (Kiener). Icon. Coq. viv., t. 66, f. 3. = C. mustelinus, Hwass, ... 41
Sulphureus (Conus), Kien. Sowb., Thes. Index. = C. mustelinus, Hwass.
Sumatræ (Princeps), Chemn. = Conus Sumatrensis, Hwass.
Sumatrensis (Conus), Hwass. Encyc. Meth., 655, t. 327, f. 8, 39
Superscriptus (Conus), Sowb. Proc. Zool. Soc., 1876, p. 753, pl. lxxv, f. 4, ... 25
Superstriatus (Conus), Sowb. Thes. Conch., 328, f. 282, . 64
Suratensis (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 669. = C. betulinus, Linn., var. 16
Sutoreanus (Conus), Weink. Küster's Conch. Cab., 311, t. 56, f. 5, 6, ... 49
Suturatus (Conus), Kiener (not Reeve), Icon., t. 88, f. 1. = C. submarginatus, Sowb.
Suturatus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 178, 60

Tabidus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 177, . 46
Tæniatus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 628, 23
Taheitensis (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 713. = C. rattus, Hwass, ... 41
Tamsianus (Conus), Duclos. Sowb., Thes. Index. ? = C. Tamsianus, Dunker.
Tamsianus (Conus), Dunk. Index Moll. Guinea Infer., p. 28, pl. iv, f. 22, 23. = C. Mediterraneus, Hwass, var. . 66
Taslei (Conus), Kien. Coq. viv., p. 360, pl. cx, f. 3, . . 56
Tasmaniæ (Conus), Sowb. Thes. Conch. Sup., 430, f. 636. = C. magus, Linn., var. 54
Tasmanicus (Conus), Tenison-Woods. Proc. Roy. Soc. Tasm., 1875, p. 139. = C. rutilus, Menke, ... 24
Taylorianus (Conus), E. A. Smith. Proc. Zool. Soc., 1880, p. 480, pl. xlviii, f. 3, ... 28
Tegulatus (Conus), Sowb. Proc. Zool. Soc., 1870, p. 256, pl. xxii, f. 12, ... 34
Telatus Conus), Reeve. Conch. Ic. Suppl., pt. 1, f. 270. = C. textile, Linn., var. 90
Tendineus (Conus), Hwass. Enc. Meth., i, pt. 2, p. 733, . 80

Digitized by Google

Tenellus (Conus), Chemn. Conch. Cab., xi, 64, t. 183, f. 1782, 1783, ... 81
Tenuis (Conus), Sowb. Thes. Conch., iii, No. 14, f. 314. = C. mustelinus, Hwass, ... 41
Tenuistriatus (Conus), Sowb. Thes. Conch., 396, fs. 532, 533. = C. glans, Hwass, ... 79
Tenuisulcatus (Conus), Sowb. Proc. Zool. Soc., 1870, p. 256, pl. xxii, f. 10, ... 77
Tenuisulcatus (Conus), Sowb. Zool. Proc., 145, t. 15, f. 2, 1873. = C. Ceylonensis, Hwass, var. 23
Terebellum (Conus), Mart. Conch., ii, pl. 52, f. 577. = C. terebra, Born.
Terebra (Conus), Born. Test. Mus. Cæs., 145, ... 80
Terebra (Conus), Chemn. Conch. Cab., x, 81, t. 143, f. 1329. = C. nussatella, Linn.
Teres lævis (Conus), Martini. Con. Cab., ii, p. 233, pl. 53, f. 584. = C. radiatus, Gmel.
Terminus (Conus), Kiener. Coq. viv., pl. 48, f. 1 *d*. = C. striatus, Linn. 85
Terminus (Conus), Lam. An. s. Vert., vii, p. 505. = C. gubernator, Hwass, ... 86
Tessellatus (Conus), Born. In Mus. Cæs., p. 131, . . 11

Testudinarius (Conus), Martini. Con. Cab., ii, p. 250, pl. 55, f. 605, ... 65
Textile (Conus), Linn. Syst. Nat., Edit. xii, 1171, . . 89
Textilia, Swainson. Malacol., 311, 1840, ... 88
Textilinus (Conus), Kien. Coq. viv., p. 333, pl. ciii, f. 5. = C. abbas, var., panniculus, Lam. 87
Thalassiarchus (Conus), Gray. Sowb., Conch. Illust., f. 80, 30
Theliconus, Swains. Malacol., 311, 1840. = Hermes, Montf.
Thomæ (Conus), Gm. Syst. Nat., 3394. = C. omaicus, Hwass, ... 80
Thomasi (Conus), Sowb. Proc. Zool. Soc., 1881, p. 635, pl. lvi, f. 4. = C. terebra, Born, var.
Thuscus (Conus), Chiereg. Crosse, Guerin's Mag., 204, 1858. = C. Mediterraneus, Hwass.
Tiaratus (Conus), Brod. Zool. Proc., 1833. = C. miliaris, Hwass, ... 22
Tigrinus (Conus), Sowb. Thes. Conch., 355, fig. 569. = C. textile, Linn., var. 90
Timorensis (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 731, ... 61
Tinianus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 713. = C. bullatus, Linn. 56
Tinianus (Conus), Kiener. Coq. viv., t. 61, f. 1. = C. bullatus, Linn. 87

Digitized by Google

Tinianus (Conus), Reeve (not Hwass). Conch. Icon., f. 236. = C. rosaceus, Chemn., var.
Tornatus (Conus), Brod. Proc. Zool.Soc., 1833, p. 53. = C. interruptus, Brod.
Traillii (Conus), A. Ad. Proc. Zool. Soc., 1855, p. 121, . 83
Traversianus (Conus), Smith. Quart. Jour. Conch., i, p. 107, ... 34
Tribunus (Conus), Crosse. J. de Conch., 1865, pl. 10, f. 2, p. 312, ... 59
Tribunus (Conus), Gm. Syst. Nat., 3377. = C. centurio, Born.
Trigonus (Conus), Reeve. Conch. Ic. Suppl., pl. iii, f. 286, 42
Tristis (Conus), Reeve. Proc. Zool. Soc., 1843, p. 178, . 77
Trochulus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 177, 13
Tulipa (Conus), Linn. Syst. Nat., Edit. x, 717, . . . 87
Tuliparia, Swainson. Malacol., 311, 1840. = Nubecula, Klein.
Turbinatus (Conus), Sowb. Thes. Conch., No. 207, f. 227, 42
Turricula (Conus), Brocchi. Conch. foss., ii, 289, t. 2, f. 7. = C. Mediterraneus, Hwass.
Turriculatus (Conus), Sowb. Thes. Sup., 435, f. 643, 644. = C. cancellatus, Lam. 75
Turritus (Conus), Sowb. Proc. Zool. Soc., 1870, t. 22, f. 14. = C. gradatulus, Weink. 38

Undatus (Conus), Kien. Iconog., t. 94, f. 1, ... 76
Undulatus (Conus), Sowb. Thes. Conch., No. 294, f. 63, . 74
Unicolor (Conus), Sowb. Conc. Ill., fig. 20, ... 47
Unifasciatus (Conus), Kien. Coq. viv., pl. cx, f. 4, . 14, 18
Ustulatus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 176. = C. consors, Sowb. 52
Utriculus, Schum. Essai Nov. Syst., 203, 1817. = Nubecula, Klein.

Variegatus (Conus), Kien. Coq. viv., p. 261, pl. cvi, f. 1, 1 *a*. = C. Africanus, Kiener, var. 84
Varius (Conus), Linn. Syst. Nat., ii, p. 1170, ... 25
Vautieri (Conus), Kiener. Ic. Coq. viv., pl. 100, f. 3, . . 19
Vayssetianus (Conus), Crosse. Jour. de Conch., 1872, p. 154, 349, pl. xvi, f. 1, ... 70
Ventricosus (Conus), Gmel. Syst. Nat., 3397. ? = C. Mediterraneus, Hwass.
Venulatus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 695, 14
Vermiculatus (Conus), Lam. An. sans Vert., vii, 452. = Var. C. hebræus, Linn. 20
Verreauxii (Conus), Kien. Coq. viv., p. 249, pl. lx, f. 5. = C. conspersus, Reeve, ... 58

Digitized by Google

Verriculum (Conus), Reeve. Conch. Ic., i, No. 208.
= C. textile, Linn., var. 89, 90
Verrucosus (Conus), Hwass. Enc. Meth. vers., i, pt. ii, p. 708, ... 78
Verulosus (Conus), Hwass. Encyc. Meth., i, 719, t. 341, f. 7. = C. granulatus, Linn. 82
Vespertinus (Conus), Humph. Sowb., Tankerville C., t. 8, f. 2, 3. = C. Timorensis, Hwass.
Vexillum (Conus), Gmelin. Syst. Nat., 3397, . . . 39
Vicarius (Conus), Lam. An. s. Vert., vii, p. 482.
= C. textile, Linn. 90
Victor (Conus), Broderip. Proc. Zool. Soc., 1842, p. 54.
= C. nobilis, Linn. 30
Victoriæ (Conus), Reeve. Proc. Zool. Soc., 1843, p. 172, . 91
Vidua (Conus), Reeve. Proc. Zool. Soc., 1843, p. 169.
= C. araneosus, Hwass, var. 9
Villepinii (Conus), Bern and Fisch. Jour. Conch., t. v, pl. ix, f. 12, p. 292, 1857, ... 37
Vimineus (Conus), Reeve. Conch. Ic., pl. vii, Sup., f. 269.
= C. aculeiformis, Reeve, ... 75
Vinctus (Conus), A. Ad. Proc. Zool. Soc., 1853, p. 118.
= C. achatinus, Chemn.
Violaceus (Conus), Reeve. Proc. Zool. Soc., 1843, p. 176, . 88
Virgatus (Conus), Reeve. Icon. Conus, Suppl., 2, . . 35
Virgo (Conus), Linn. Syst. Nat., Gm., p. 3376, . . 43
Viridis (Conus), Sowb. Thes. Conch., 162, fig. 102.
= C. rattus, Hwass, ... 41
Viridulus (Conus), Lam. An. s. Vert., vii, p. 446.
= C. imperialis, Linn., var. 9
Vittatus (Conus), Lam. An. s. Vert., vii, p. 470, . . 43
Vitulinus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 648, pl. 326, f. 3, ... 51
Voluminalis (Conus), Hinds. Proc. Zool. Soc., 1844, . 35
Voluta, Browne. Nat. Hist., Jamaica, 410, 1756.
= Conus, Linn.
Vulpinus (Conus), Hwass. Encyc. Meth., 648.
= C. planorbis, Born.

Weinkauffii (Conus), Lobbecke. Jahr. Deutsch. Mal. Gesel., ix, p. 90, 1882, ... 30
Wilmeri (Conus), Sowb. Proc. Zool. Soc., 1882, p. 118, pl. v, f. 5, ... 77

Ximenes (Conus), Gray. Zool. Beechey's Voy., p. 119, 1839. = C. interruptus, Brod. 63

Zebra (Conus), Lam. An. s. Vert., vii, p. 481; Kiener, t. 76, f. 2. = C. cinereus, Hwass, ... 58

Digitized by Google

Zebra (Conus), Reeve. Conch. Icon., f. 87.
= C. virgatus, Reeve, ... 35
Zebra (Conus), Sowb. Conch. Illust., 43.
= C. nisus, Chemn. 59
Zebroides (Conus), Kien. Coq. viv., p. 257, pl. cv, f. 5, . 84
Zelandicus (Conus), Hutton. Cat. Mar., Moll. N. Z., p. 23.
= C. aplustre, Reeve. Hutton in litt. 68
Zeylanicus (Conus), Wd. Sowb., Thes. Index.
= C. obesus, Hwass.
Ziczac (Conus), Muhlfeldt. Sowb., Thes. Index, . . 93
Zonatus (Conus), Hwass. Enc. Meth. vers., i, pt. 2, p. 613, 9

REFERENCE TO PLATES.

CONIDÆ.

Plate 1.

FIGURE. PAGE.

1. Conus marmoreus, Linn. Sowb., Thes. Conch., f. 5, . 7
2. Conus bandanus, Hwass (= marmoreus, var.). Sowb., Thes., f. 8, ... 8
3. Conus Crosseanus, Bernardi (= marmoreus, var.). Jour. de Conch., 3 ser., i, t. 6, f. 5, ... 8
4. Conus nigrescens, Sowb. (= marmoreus, var.). Thes. Conch., t. 287, f. 618, ... 8
5. Conus pseudomarmoreus, Desh. (= marmoreus, var.). Jour. de Conch., 1875, t. 9, f. 4, ... 8
6. Conus nocturnus, Hwass. Thes. Conch., f. 4, . . 8
7. Conus Deburghiæ, Sowb. (= nocturnus). Thes. Conch., f. 6, ... 8
8. Conus arachnoideus, Gmel. (= araneosus, Hwass). Thes. Conch., f. 14, ... 8
9. Conus Nicobaricus, Hwass (= araneosus, var.). Sowb, Thes., f. 11, ... 9
10. Conus vidua, Reeve (= araneosus, var.). Sowb., Thes., f. 9, ... 9
11. Conus imperialis, Linn. Thes. Conch., f. 2, . . 9
12. Conus viridulus, Lam. (= imperialis, var.). Thes. Conch., f. 1, ... 9
13. Conus fuscatus, Lam. (= imperialis, var.). Sowb., Thes., f. 3, ... 9
14. Conus Recluzianus, Bernardi. Thes. Conch., f. 14, . 9
15. Conus zonatus, Hwass. Sowb., Thes. Conch., f. 38, . 9

Digitized by Google

Plate 2.

FIGURE.		PAGE.
16.	Conus marchionatus, Hinds. Thes. Conch., f. 172,	9
17.	Conus literatus, Linn. Thes. Conch., f. 156,	10
18.	Conus Gruneri, Reeve (= literatus). Conch. Icon., f. 231,	10
19.	Conus millepunctatus, Lam. (= literatus, var.). Thes. Conch., f. 151,	10
20.	Conus cœlatus, A. Adams. Sowb., Thes., f. 107,	10
21.	Conus planaxis, Desh. Thes. Conch., t. 287, f. 625,	10
22.	Conus musicus, Hwass. Reeve, Conch. Icon., f. 113,	11
23.	Conus Mighelsi, Kiener (= musicus). Coq. viv., t. 103, f. 1,	11
24.	Conus eburneus, Hwass. Thes. Conch., f. 247,	11
25.	Conus polyglotta, A. Ad. (= eburneus). Thes. Conch., f. 248,	11
26.	Conus tessellatus, Born. Sowb., Thes., f. 250,	11
27.	Conus crassus, Sowb. (= tessellatus). Thes. Conch., f. 254,	11
28.	Conus Baylei, Jousseaume. Mag. de Zool., 1871–2, t. 18, f. 2,	11
29.	Conus suturatus, Reeve. Conch. Icon., f. 250,	11
29 *a*.	Conus suturatus, Reeve. Thes. Conch., f. 256,	11
30.	Conus Proteus, Hwass. Reeve, Conch. Icon., f. 219 *b*,	12
31.	Conus leoninus, Hwass (= Proteus). Thes. Conch., f. 232,	12
32.	Conus spurius, Auct. (= Proteus). Thes. Conch., f. 236,	12
33.	Conus ochraceus, Lam. (= Proteus). Thes. Conch., f. 432,	12
34.	Conus bicolor, Sowb. (= Proteus, var.). Thes. Conch., f. 234,	12
35.	Conus papilionaceus, Hwass (= Proteus, var.). Sowb., Thes., f. 233,	12

Plate 3.

36.	Conus Siamensis, Hwass (= Proteus, var.). Thes. Conch., f. 352,	12
37.	Conus Lorenzianus, Chemn. (= flammeus, Lam.). Thes. Conch., f. 212,	12
38, 39.	Conus characteristicus, Chemn. Sowb., Thes., f. 337, 338,	13
40.	Conus succinctus, A. Ad. Thes. Conch., f. 257,	13
41.	Conus ambiguus, Reeve. Conch. Icon., f. 244,	13
42.	Conus griseus, Kiener (= ambiguus). Iconographie, t. 63, f. 2,	13
43.	Conus cuneiformis, Smith. Quar. Jour. Conch., p. 202,	13
43 *a*.	Conus trochulus, Reeve. Conch. Icon., f. 246,	13

Digitized by Google

FIGURE. PAGE.
44. Conus cyanostoma, A. Ad. Thes. Conch., f. 304, . 14
45. Conus frigidus, Reeve. Conch. Icon. Suppl., t. 3, f. 284, 14
46. Conus venulatus, Hwass. Reeve, Icon., f. 195 *b*, . . 14
47. Conus nivosus, Lam. (= venulatus). Kiener, Iconog., t. 81, f. 1 *c*, ... 14
48, 49. Conus nivifer, Brod. (= venulatus, var.). Thes. Conch., f. 265, 397, ... 15
50. Conus Crotchii, Reeve (venulatus, var.). Thes., . 15
51. Conus genuanus, Hwass. Reeve, Icon., f. 81, . . 15
52. Conus Prometheus, Hwass. Thes. Conch., f. 245, . 15

PLATE 4.

52 *a*. Conus Fergusoni, Sowb. Zool. Proc., 1873, t. 15, f. 1, 15
53. Conus omaicus, Hwass. Thes. Conch., f. 497, . . 16
54. Conus betulinus, Linn. Thes. Conch., f. 244, . . 16
55. Conus betulinus, var. Suratensis, Hwass. Sowb., Thes., f. 246, ... 16
56. Conus glaucus, Hwass. Reeve, Conch. Icon., f. 10, . 16
57. Conus figulinus, Linn. Kiener, Iconog., t. 28, f. 1 *b*, . 16
58. Conus figulinus, var. Loroisii, Kiener. Thes. Conch., f. 243, ... 16
59. Conus quercinus, Hwass. Thes. Conch., f. 240, . . 17
60. Conus pyriformis, Reeve. Sowb., Thes., f. 354, . . 17
61. Conus patricius, Hinds (= pyriformis). Reeve, Icon., f. 63, ... 17
62. Conus Californicus, Hinds. Sowb., Thes., f. 332, . 17
63. Conus dealbatus, A. Ad. (= Californicus). Thes. Conch., f. 103, ... 17
64. Conus scalptus, Reeve. Conch. Icon., f. 203, . . 18
65. Conus unifasciatus, Kiener. Coq. viv., t. 110, f. 4, . 18
66. Conus arenatus, Linn. Thes. Conch., f. 18, . . 18
67. Conus obesus, Hwass (Ceylonicus, Chemn.). Sowb., Thes., f. 22, ... 18
68. Conus pulicarius, Hwass, var. fustigatus. Hwass, Thes. Conch., f. 21, ... 19

PLATE 5.

69. Conus pulicarius, Hwass. Sowb., Thes., f. 20, . . 19
70. Conus Vautieri, Kiener. Coq. viv., t. 100, f. 3, . . 19
71. Conus stercus-muscarum, Linn. Thes. Conch., f. 347, 19
72. Conus mus, Hwass. Thes. Conch., f. 78, . . . 19
73. Conus roseus, Lam. (= mus, var.). Sowb., Thes., f. 94, 20
74. Conus punctatus, Chemn. Sowb., Thes., f. 92, . . 20
75. Conus Hebræus, Linn. Kiener, Coq. viv., t. 4, f. 2, . 20
76. Conus sphacelatus, Sowb. (= Hebræus, juv.). Reeve, Ic., f. 26, ... 20

Digitized by Google

FIGURE. PAGE.

77. Conus vermiculatus, Hwass (= Hebræus, var.). Thes. Conch., f. 53, ... 20
78. Conus maculiferus, Sowb. Thes. Conch., f. 74. . . 21
79. Conus balteatus, Sowb. Reeve, Conch. Icon., f. 88, . 21
80. Conus pigmentatus, Ad. and Reeve (= balteatus). Thes. Conch., f. 101, ... 21
81. Conus cernicus, H. Adams (= balteatus). Küster, t. 42, f. 7, ... 21
82. Conus encaustus, Kiener. Coq. viv., t. 14, f. 2, . . 21
83. Conus prætextus, Reeve (= encaustus). Reeve, Conch. Icon. Suppl., t. 2, f. 277, ... 21
84. Conus miliaris, Hwass. Reeve, Icon., f. 198, . . 21
85. Conus tiaratus, Brod. (= miliaris). Sowb., Thes. Conch., f. 80, ... 22
86. Conus fulgetrum, Sowb. (= miliaris). Thes. Conch., f. 69, ... 22
87. Conus scaber, Kiener (= miliaris). Coq. viv., t. 100, f. 1, ... 22
88. Conus minimus, Linn. (= miliaris). Reeve, Icon., f. 143 *a*, ... 22
89. Conus abbreviatus, Nuttall (= miliaris, var.). Thes. Conch., f. 84, ... 22
90. Conus Aristophanes, Duclos (= miliaris, var.). Thes. Conch., f. 81, ... 22

Plate 6.

91. Conus reflectus, Sowb. Zool. Proc., 1876, t. 75, f. 4, . 22
92. Conus baccatus, Sowb. Zool. Proc., 1876, t. 75, f. 5, . 22
93. Conus tæniatus, Hwass. Reeve, Icon., f. 107, . . 23
94. Conus Ceylonensis, Hwass. Thes. Conch., f. 141, . 23
95. Conus nux, Brod. (= Ceylonensis). Reeve, Icon., f. 110, ... 23
96. Conus acutus, Sowb. (= Ceylonensis, var.). Thes. Conch., f. 142, ... 23
97. Conus pusillus, Chemn. (= Ceylonensis, var.). Thes. Conch., f. 144, ... 23
98. Conus tenuisulcatus, Sowb. (= Ceylonensis, var.). Zool. Proc., 1873, t. 15, f. 2, ... 23
99. Conus sponsalis, Chemn. (= Ceylonensis, var.). Rve., Icon., f. 109, ... 23
100. Conus nanus, Brod. (= Ceylonensis, var.). Thes. Conch., f. 144, ... 24
1. Conus speciosus, Sowb. Thes. Conch., f. 138, . . 24
2. Conus Couderti, Bernardi. Jour de Conch., 2 ser., iv, t. 4, f. 3, ... 24
3. Conus rutilus, Menke. Reeve, Icon., f. 264, . . . 24

Digitized by Google

FIGURE. PAGE.
4. Conus Smithii, Angas. Zool. Proc., 1877, t. 5, f. 8, . 24
5. Conus pontificalis, Lam. Reeve, Icon., f. 15, . . 24
6, 7. Conus aurantius, Hwass. Thes. Conch., f. 35, 36, . 25
8, 9. Conus varius, Linn. Thes. Conch., f. 40, 42, . . 25
10. Conus interruptus, Mawe (= varius). Thes. Conch., f. 43, ... 25
11. Conus superscriptus, Sowb. Zool. Proc., 1876, t. 75, f. 6, ... 25
12. Conus bœticus, Reeve. Conch. Icon., f. 226, . . 26
13. Conus rivularis, Reeve (= bœticus). Conch. Icon. Suppl., t. 6, f. 261, ... 26
14. Conus albomaculatus, Sow. (= bœticus). Thes. Conch., f. 113, ... 26
15. Conus muriculatus, Sowb. Reeve, Icon., f. 112, . . 26

PLATE 7.

16. Conus plumbeus, Reeve. Conch. Icon., f. 253, . . 26
17. Conus liratus, Reeve (= plumbeus). Conch. Icon., f. 268, ... 26
18. Conus Moluccensis, Chemn. Sowb., Thes. Conch., f. 46, 26
19. Conus proximus, Sowb. (= Moluccensis). Thes. Conch. Suppl., f. 619, ... 26
20. Conus Magellanicus, Hwass. Thes. Conch., f. 77, . 26
21. Conus speciosissimus, Reeve (= Magellanicus). Sowb., Thes., f. 124, ... 27
22. Conus Lubeckianus, Bern. (= Magellanicus). Jour. de Conch., 3 ser., 6, f. 7, ... 27
23. Conus cidaris, Kiener (= Magellanicus, var.). Coq. viv., t. 63, f. 1, ... 27
24. Conus cardinalis, Hwass. Reeve, Icon., f. 102, . . 27
25. Conus dianthus, Sowb. Zool. Proc., 1882, t. 5, f. 4, . 27
26. Conus Archon, Brod. Sowb., Thes. Conch., f. 252, . 27
27. Conus castaneus, Kiener (= Archon). Coq. viv., t. 104, f. 3, ... 27
28. Conus sanguineus, Kiener (= Archon, var.). Coq. viv., t. 111, f. 2, ... 27
29. Conus granarius, Kiener (= Archon, var.). Coq. viv., t. 98, f. 1, ... 27
30. Conus Lamberti, Souverb. Jour. de Conch., 1877, t. 1, f. 1, ... 28
31. Conus nebulosus, Solander. Thes. Conch., f. 62, . 28
32–34. Conus cedonulli, Hwass (= nebulosus). Thes. Conch., f. 64, 67, 68, ... 28
35. Conus Taylorianus, Smith. Zool. Proc., 1880, t. 48, f. 3, 28
36. Conus diadema, Sowb. (= brunneus). Thes. Conch., f. 47, ... 28

Digitized by Google

FIGURE. PAGE.
37. Conus brunneus, Gray. Thes. Conch., f. 48, . . 28

PLATE 8.

38. Conus gladiator, Brod. Reeve, Icon., f. 127, . . 28
39. Conus suffusus, Sowb. Zool. Proc., 1870, t. 22, f. 9, . 29
40. Conus Noumeensis, Crosse (= suffusus, var.). Jour. de Conch., 1872, t. 16, f. 2, ... 29
41. Conus princeps, Linn. Reeve, Conch. Icon., f. 36 *b*, . 29
42. Conus princeps, Linn., var. regius, Chemn. Reeve, Icon., f. 36 *a*, ... 29
43. Conus princeps, Linn., var. lineolatus, Val. Thes. Conch., f. 32, ... 29
44. Conus ammiralis, Linn. Thes. Conch., f. 226, . . 29
45. Conus archithalassus, Dillw. (= ammiralis.) Thes. Conch., f. 24, ... 29
46. Conus ammiralis, Linn., var. granulatus, Kiener. Coq. viv., t. 21, f. 1 *d*, ... 29
47. Conus nobilis, Linn. Reeve, Conch. Icon., f. 2 *a*, . 30
48. Conus cordigerus, Sowb. (= nobilis). Thes. Conch., f. 498, ... 30
49. Conus victor, Brod. (= nobilis). Reeve, Icon., f. 5, . 30
50, 51. Conus thalassiarchus, Gray. Sowb., Thes. Conch., f. 165, 166, ... 30
52. Conus Amadis, Mart. Thes. Conch., f. 170, . . 30
53. Conus Weinkauffii, Löbbecke. Jahrb. Deutsch. Mal. Gesell., ix, t. 4, f. 3, ... 30
54. Conus acuminatus, Hwass. Thes. Conch., f. 196, . 31

PLATE 9.

55. Conus cuneatus, Sowb. (= acuminatus, var.) Zool. Proc., 1873, t. 15, f. 5, ... 31
56. Conus Neptunus, Kiener (= Schech Jickeli). Coq. viv., t. 99, f. 5, ... 31
57. Conus turritus, Sowb. (= gradatulus, Weink.) Zool. Proc., 1870, t. 22, f. 14, ... 38
58. Conus Coxeni, Brazier. Zool. Proc., 1875, t. 4, f. 10, 30
59. Conus nodulosus, Sowb. Thes. Conch., t. 288, f. 635, . 31
60. Conus luctificus, Reeve. Thes. Conch., f. 198, . . 31
61. Conus bifasciatus, Sowb. Thes. Conch., f. 302, . . 32
62. Conus spiculum, Reeve. Conch. Icon. Suppl, f. 266, . 32
63. Conus subcarinatus, Sowb. Thes. Conch. Suppl., t. 286, f. 615, ... 32
64. Conus Malaccanus, Hwass. Thes. Conch., f. 366, . 33
65. Conus fulgurans, Hwass. Sowb., Thes., f. 202, . . 32
66. Conus eximius, Reeve (= fulgurans). Thes. Conch., f. 201, ... 32

Digitized by Google

FIGURE. PAGE.
67. Conus Delessertianus, Recl. Sowb., Thes., f. 365, . 33
68. Conus centurio, Born. Thes. Conch., f. 367, . . 33
69. Conus anabathrum, Crosse. Sowb., Thes. Conch., t. 288, f. 639, ... 33
70. Conus articulatus, Sowb. Zool. Proc., 1873, t. 15, f. 3, 33
71. Conus tegulatus, Sowb. Zool. Proc., 1870, t. 22, f. 12, 34
72. Conus Macaræ, Bern. Thes. Conch., t. 286, f. 617, . 34
73. Conus monile, Hwass. Thes. Conch., f. 178, . . 34
74. Conus generalis, Linn. Thes. Conch., f. 180, . . 34
75. Conus Maldivus, Hwass. Thes. Conch., f. 183, . . 34

PLATE 10.

76. Conus Maldivus, Hwass. Sowb., Thes., f. 182, . . 34
77. Conus voluminalis, Hinds. Reeve., Conch. Icon., f. 206, 35
78. Conus floridulus, Ad. and Reeve (= voluminalis, var.) Thes., f. 97, ... 35
79. Conus Lorenzianus, Chemn. Thes. Conch., f. 430, . 35
80. Conus virgatus, Reeve. Sowb., Thes., f. 190, . . 35
81. Conus Cumingii, Reeve (= virgatus, var.). Thes. Conch., f. 193, ... 35
82. Conus sanguinolentus, Reeve (= virgatus, var.). Thes. Conch., f. 409, ... 35
83. Conus scalaris, Val. Sowb., Thes. Conch., f. 192, . 35
84. Conus flavescens, Gray. Reeve, Icon., f. 168, . . 36
85. Conus Largillierti, Kiener. Reeve, Icon. Suppl., t. 2, f. 275, ... 36
86. Conus Traversianus, Smith. Quar. Jour. Conch., i, 107, 34
87. Conus Bayani, Jousseaume. Guerin's Magazine, 1872, t. 18, f. 1, ... 35
88. Conus Guestieri, Lorois. Jour. de Conch., 2 ser., iv, t. 12, f. 5, ... 35
89, 90. Conus Pealii, Green. Thes. Conch., f. 393, 394, . 36
91. Conus Stearnsii, Conr. (= Pealii). Am. Jour. Conch., v, t. 10, f. 1, ... 36
92. Conus candidus, Kiener (= Pealii). Coq. viv., t. 97, f. 1, ... 36
93. Conus lemniscatus, Reeve. Sowb., Thes., t. 286, f. 608, 36
94. Conus Clerii, Reeve. Conch. Icon., f. 229, . . 37
95. Conus emarginatus, Reeve. Conch. Icon., f. 232, . 37
95 *a*. Conus minutus, Reeve. Conch. Icon., f. 259, . . 37
96. Conus lentiginosus, Reeve (= emarginatus). Conch. Icon., f. 245, ... 37
97. Conus Villepini, Bern. and Fischer. Thes. Conch., t. 288, f. 629, ... 37

PLATE 11.

98, 99. Conus regularis, Sowb. Thes. Conch., f. 208, 209, 37

Digitized by Google

FIGURE PAGE.

100. Conus incurvus, Brod. (= regularis). Thes. Conch., f. 194, ... 37
1. Conus angulatus, A. Ad. (= regularis). Thes. Conch., f. 388, ... 37
2. Conus dispar, Sowb. (= regularis). Thes., Conch. f. 195, ... 37
3. Conus selectus, A. Ad. Sowb., Thesaurus, f. 361, . 38
4. Conus Floridanus, Gabb. Am. Jour. Conch., iv, t. 15, f. 4, ... 38
5. Conus Floridensis, Sowb. (= Floridanus). Zool. Proc., 1870, t. 22, f. 11, ... 38
6. Conus Sieboldii, Reeve. Thes. Conch., f. 369, . . 38
7. Conus rarimaculatus, Sowb. (= Sieboldii). Zool. Proc., 1870, t. 22, f. 4, ... 38
8. Conus papillaris, Reeve. Sowb., Thes., f. 377, . . 38
9. Conus optabilis, A. Ad. Sowb. Thes., f. 364, . . 38
10. Conus Mazei, Desh. Jour. de Conch., 1874, t. 1, f. 1, . 39
11. Conus Sumatrensis, Hwass. Thes. Conch., f. 158, . 39
12. Conus nemocanus, Hwass (= Sumatrensis, var.). Thes. Conch., f. 153, ... 39
12 *a*. Conus vexillum, Gmel. Thes. Conch., f. 163, . . 39
13. Conus lævigatus, Sowb. (= vexillum). Thes., f. 149, 39
14. Conus Robillardi, Bern. (= vexillum, juv.?) Jour. de Conch., 2 ser., iii, t. 7, f. 2, ... 39
15. Conus concolor, Sowb., Thes. Conch., f. 206, . . 40
16. Conus miles, Linn. Thes. Conch., f. 157, . . . 40
17. Conus sulphuratus, Kiener (= mustelinus). Coq. viv., t. 66, f. 3, ... 40
18. Conus citrinus, Kiener (= mustelinus). Coq. viv., t. 78, f. 4, ... 40

Plate 12.

19. Conus mutabilis, Chemn. Sowb., Thes. Conch., f. 216, 40
20. Conus hyæna, Reeve (= mutabilis). Thes. Conch., f. 431, ... 40
21, 22. Conus capitaneus, Linn. Thes. Conch., f. 175, 176, 40
23. Conus mustelinus, Hwass (= capitaneus). Thes. Conch., f. 160, ... 40
24. Conus classiarius. Kiener (= capitaneus, var.). Kien., Iconog., t. 63, f. 3, ... 40
25. Conus rattus, Hwass. Reeve, Conch. Icon., f. 78, . 41
26. Conus Taheitensis, Hwass (= rattus, var.). Thes. Conch., f. 26, ... 41
27. Conus viridis, Sowb. (= rattus). Thes. Conch., f. 192, 41
28. Conus Lischkeanus, Weinkauff. Küster, Conch. Cab, t. 56, f. 2, ... 41

Digitized by Google

FIGURE. PAGE.
29. Conus semivelatus, Sowb. Zool. Proc., t. 5, f. 3, 1882, 41
30. Conus classiarius, Hwass. Sowb., Thes., f. 213, . . 41
31. Conus splendidulus, Sowb. (= classiarius). Thes. Conch., f. 211, ... 41
32. Conus Rüppellii, Reeve (= classiarius). Thes. Conch., f. 143, ... 41
33. Conus adustus, Sowb. (= classiarius). Thes. Conch., f. 403, ... 41
34. Conus Pazii, Bern. (= classiarius, var.). Thes. Conch., t. 289, f. 649, ... 42
35. Conus trigonus, Reeve. Conch. Icon. Suppl., t. 3, f. 286, 42
36. Conus aureolus, Sowb. Thes. Conch., f. 395, . . 42
37. Conus coffea, Gmel. Thes. Conch., f. 173, . . . 42
38. Conus excavatus, Sowb. (= coffea). Thes. Suppl., t. 286, f. 616, ... 42
39. Conus incarnatus, Reeve (= coffea). Thes. Conch., f. 228, ... 42
40. Conus turbinatus, Sowb. Thes. Conch., f. 227, . . 42

PLATE 13.

41. Conus vittatus, Lam. Thes. Conch., f. 274, . . 43
42. Conus Cumingii, Reeve (= vittatus). Thes. Conch., f. 415, ... 43
43. Conus orion, Brod. (= vittatus, var.). Thes. Conch., f. 200, ... 43
44. Conus Henoquei, Bern. (= vittatus, var.). Jour. de Conch., 2 ser., iv, t. 13, f. 4, ... 43
45. Conus Virgo, Linn. Sowb., Thes., f. 167, . . . 43
46. Conus Cælinæ, Crosse (= virgo, var.). Thes. Suppl., t. 287, f. 623, ... 43
47. Conus emaciatus, Reeve. Thes. Conch., f. 258, . . 44
48. Conus flavidus, Lam. Thes. Conch., f. 168, . . 44
49. Conus Maltzanianus, Weink. (= flavidus). Reeve, Ic., f. 207, ... 44
50. Conus mirmillo, Crosse (= flavidus). Jour. de Conch., 1865, t. 9, f. 2, ... 44
51. Conus Gloynei, Sowb. Zool. Proc., 1881, t. 56, f. 5, . 44
52. Conus Lombei, Sowb. Zool. Proc., 1881, t. 56, f. 6, . 44
53. Conus ægrotus, Reeve. Thes. Conch., f. 215, . . 45
54. Conus lividus, Hwass. Sowb, Thes., f. 27, . . 45
55. Conus citrinus, Gmel. (= lividus). Thes. Conch., f. 70, 45
56. Conus sugillatus, Reeve (= lividus, var.). Thes. Conch., f. 50, ... 45
57. Conus crepusculum, Reeve (= lividus). Sowb., Thes., f. 57, ... 45
58. Conus oblitus, Reeve. Sowb., Thes., f. 37, . . . 45

Digitized by Google

FIGURE. PAGE.
59. Conus Moussoni, Crosse. Jour. de Conch., 1865, t. 10, f. 3, ... 46
60. Conus pryntanis, Sowb. Zool. Proc., 1882, t. 5, f. 1, . 46
61. Conus Evelinæ, Sowb. Zool. Proc., 1882, t. 5, f. 2, . 46
62. Conus primula, Reeve. Conch. Icon. Suppl., t. 6, f. 256, 46
63. Conus Cibielli, Kiener. Coq. viv., t. 107, f. 2, . . 46
64. Conus tabidus, Reeve. Conch. Icon., f. 243, . . 46

PLATE 14.

65. Conus hepaticus, Kiener. Thes. Conch., f. 191, . . 47
66. Conus albicans, Sowb. Thes. Conch., f. 98, . . 47
67. Conus unicolor, Sowb. Thes. Conch., f. 83, . . 47
68, 69. Conus distans, Hwass. Reeve, Icon., f. 174 *a*, *c*, . 47
70. Conus daucus, Hwass. Thes. Conch., f. 189, . . 48
71. Conus Reevei, Kiener (= daucus). Thes. Conch., f. 188, 48
72. Conus archetypus, Crosse (= daucus, var.) Jour. de Conch., 1865, t. 10, f. 7, ... 48
73. Conus narcissus, Lam. Sowb., Thes., f. 436, . . 48
74. Conus lithoglyphus, Meusch. Thes. Conch., f. 185, . 48
75. Conus lacinulatus, Kiener (= lithoglyphus). Coq. viv., t. 108, f. 2, ... 48
76. Conus attenuatus, Reeve. Conch. Icon., f. 263, . 49
77. Conus Sutorianus, Weinkauff. Küster, Conch. Cab., t. 56, f. 5, ... 49
78. Conus pulchellus, Swains. Thes. Conch., f. 220. . 49
79. Conus cinctus, Swains. (= pulchellus). Thes. Conch., f. 231, ... 49
80. Conus connectens, A. Ad. (= pulchellus). Thes. Conch., f. 230, ... 49
81. Conus planorbis, Born. Thes. Conch., f. 491, . . 50
82. Conus circumsignatus, Crosse. Jour. de Conch., 1865, t. 10, f. 14, ... 50
83. Conus Chenui, Crosse. Sowb., Thes. Suppl., t. 287, f. 624, ... 50
84. Conus Löbbeckeanus, Weink. (= Chenui). Küster, Conch. Cab., t. 36, f. 3, ... 50
85. Conus lineatus, Chemn. Thes. Conch., f. 219, . . 50
86, 87. Conus vitulinus, Hwass. Thes. Conch., f. 223, 224, 51

PLATE 15.

88. Conus Carpenteri, Crosse (= vitulinus, var.) Jour. de Conch., 1865, t. 9, f. 1, ... 51
89. Conus Augur, Hwass. Thes. Conch., f. 154, . . 51
90. Conus lignarius, Reeve. Thes. Conch., f. 269, . . 51
91. Conus furvus, Reeve (= lignarius). Thes. Conch., f. 267, ... 51

Digitized by Google

FIGURE. PAGE.
92. Conus Cecilei, Kiener (= lignarius). Thes. Conch., f. 313, ... 51
93. Conus fasciatus, Kiener (= lignarius, var.). Coq. viv., t. 109, f. 2, ... 51
94. Conus multilineatus, Sowb. Zool. Proc., 1875, t. 24, f. 5, ... 52
95. Conus Kobelti, Löbbecke. Jahrb. Deutsch. Mal. Gesell., ix, t. 4, f. 4, ... 52
96. Conus consors, Sowb. Thes. Conch., f. 492, . . 52
97. Conus carinatus, Swains. (= consors). Thes. Conch., f. 495, ... 52
98. Conus anceps, A. Ad. (= consors). Sowb., Thes., f. 493, ... 52
99. Conus Daullei, Crosse (= consors). Mag. de Zool., 1858, t. 2, f. 2 *a*, ... 52
100. Conus ustulatus, Reeve (= consors). Thes Conch. Suppl., t. 289, f. 647, ... 52
1. Conus fulvocinctus, Crosse. Jour. de Conch., 1873, t. 11, f. 5, ... 52
2. Conus consanguineus, E. A. Smith. Zool. Proc., 1880, t. 48, f. 1, ... 52
3. Conus magus, Linn. Thes. Conch., f. 513, . . . 53
4. Conus raphanus, Hwass (= magus). Thes. Conch., f. 509, ... 53
5. Conus Consul, Boivin (= magus). Jour. de Conch., 3 ser., iv, t. 1, f. 5, ... 53
6. Conus striolatus, Kiener (= magus). Thes. Conch., f. 328, ... 53
7. Conus Borneensis, Sowb. (= magus). Thes. Suppl., t. 289, f. 648, ... 53
8. Conus assimilis, A. Ad. (= magus). Thes. Conch., f. 505, ... 53
9. Conus Frauenfeldi, Crosse (= magus, var.). Thes. Conch., f. 525, ... 53
10. Conus Metcalfei, Reeve (=magus, var.). Conch. Icon., f. 194, ... 53

Plate 16.

11. Conus Rollandi, Bern (= magus, var.). Thes. Conch. Suppl., t. 289, f. 652, ... 53
12. Conus epistomium, Reeve (= magus, var.). Conch. Icon., f. 227, ... 53
13. Conus Tasmaniæ, Sowb. (= magus, var.). Thes. Suppl., t. 288, f. 636, ... 54
14. Conus epistomioides, Weink. (= magus, var.). Küster, Conch. Cab., t. 57, f. 6, ... 54

Digitized by Google

FIGURE. PAGE.

15. Conus pertusus, Hwass. Thes. Conch., f. 273, . . 54
16. Conus festivus, Chemn. (= pertusus). Thes. Conch., f. 272, ... 54
17. Conus inquinatus, Reeve (= pertusus). Conch. Icon. Suppl., t. 5, f. 251, ... 54
18. Conus simplex, Sowb. Thes. Conch., f. 199, . . 54
19. Conus sindon, Reeve. Conch. Icon., f. 233 *a*, . . 54
20. Conus miser, Boivin. Thes. Conch. Suppl., t. 287, f. 630, 55
21, 22. Conus mercator, Linn. Conch. Icon., f. 83 *b*, *a*, . 55
23. Conus desidiosus, A. Ad., (= mercator, var.). Thes. Conch., f. 306, ... 55
24, 25. Conus cuneolus, Reeve. Conch. Icon., f. 205 *a*, *b*, 55
26, 27. Conus Natalis, Sowb. Thes. Conch., f. 292, 293, . 55
28. Conus olivaceus, Kiener. Coq. viv., t. 111, f. 3, . . 55
29. Conus Taslei, Kiener (= olivaceus). Coq. viv., t. 110, f. 3, ... 56
30, 31. Conus irregularis, Sowb. (= olivaceus, var.). Thes. Conch., f. 418, 419, ... 56
32, 33. Conus infrenatus, Reeve. Sowb., Thes., f. 451, 452, 56

PLATE 17.

34, 35. Conus rosaceus, Chemn. Thes. Conch., f. 455, 456, 56
36. Conus roseotinctus, Sowb. Thes. Suppl., t. 286, f. 604, 56
37. Conus Tinianus, Reeve (= rosaceus, var.). Sowb., Thes., f. 450, ... 56
38. Conus Loveni, Krauss (= rosaceus, var.). Thes. Conch., f. 449, ... 56
39. Conus signifer, Crosse (= rosaceus, var.). Jour. de Conch., 1865, t. 10, f. 6, ... 56
40. Conus Lamarckii, Kiener. Coq. viv., t. 83, f. 4, . . 56
41. Conus inflatus, Kiener (= Lamarckii). Coq. viv., t. 71, f. 3, ... 56
42. Conus citrinus, Kiener (= Lamarckii). Coq. viv., t. 59, f. 6, ... 56
43. Conus Broderipii, Reeve. Conch. Icon., f. 254 *b*, . 57
44. Conus spectrum, Linn. Thes. Conch., f. 458, . . 57
45. Conus collisus, Reeve (= spectrum). Thes. Conch., f. 459, ... 57
46, 47. Conus pica, Ads and Reeve (= spectrum). Sowb., Thes., f. 290, 291, ... 57
48. Conus subulatus, Sowb. (= spectrum). Thes. Conch., f. 472, ... 57
49. Conus lictor, Boivin. Jour. de Conch., 3 ser., iv, t. 1, f. 1, ... 57
50. Conus dolium, Boivin. Jour. de Conch., 3 ser., iv, t. 1, f. 4, ... 75

Digitized by Google

FIGURE. PAGE.
51. Conus lacteus, Reeve (= spectrum, var.). Conch. Icon., f. 234, ... 57
52. Conus Andamanensis, Smith. Zool. Proc., 1878, t. 50, f. 1 *a*, ... 57
53. Conus conspersus, Reeve. Conch. Icon., f. 262, . . 58
54. Conus Verreauxii, Kiener (= conspersus). Coq. viv., t. 60, f. 5, ... 58

PLATE 18.

55. Conus stillatus, Reeve (= conspersus). Thes. Conch., f. 461, ... 58
56. Conus daphne, Boivin (= conspersus, var.). Thes. Suppl., t. 288, f. 630, ... 58
57. Conus cinereus, Hwass. Thes. Conch., f. 467, . . 58
58. Conus Gabrielli, Kiener (= cinereus). Coq. viv., t. 74, f. 4, ... 58
59. Conus straturatus, Sowb. (= cinereus, var.). Thes. Suppl., t. 286, f. 609, ... 58
60. Conus Bernardii, Kiener (= cinereus, var.). Thes. Conch., f. 474, ... 58
61. Conus politus, Weink. (= cinereus, var.). Küster, Conch. Cab., t. 62, f. 2, ... 59
62. Conus albospira, Smith. Zool. Proc., 1880, t. 48, f. 4, 59
63, 64. Conus nisus, Chemn. Thes. Conch., f. 470, 471, . 59
65. Conus zebra, Sowb. (= nisus). Thes. Conch., f. 466, . 59
66. Conus Blanfordianus, Crosse (= nisus). Jour. de Conch., 1867, t. 2, f. 1, ... 59
67. Conus stigmaticus, A. Ad. (= nisus). Thes. Conch., f. 460, ... 59
68. Conus cocceus, Kiener (= nisus). Coq. viv., t. 107, f. 1 *a*, ... 59
69. Conus submarginatus, Sowb. Zool. Proc., 1870, t. 22, f. 6, 59
70. Conus suturatus, Kiener (= submarginatus). Coq. viv., t. 88, f. 1, ... 60
71. Conus radiatus, Gmel. Thes. Conch., f. 490, . . 60
72. Conus parius, Reeve (= radiatus). Thes. Conch., f. 473, 60
73. Conus Gubbæ, Kiener (= radiatus). Thes. Conch., f. 475, ... 60
74. Conus contusus, Reeve. Conch. Icon. Suppl., t. 2, f. 276, 60
75. Conus præfectus, Hwass (= ochroleucus, Gmel.). Reeve, Icon., f. 138, ... 60
76. Conus iodostoma, Reeve. Conch. Icon., f. 159, . . 60
77. Conus Lienardi, Crosse and Bern. Thes. Suppl., t. 286, f. 611, ... 60

Digitized by Google

Plate 19.

FIGURE. PAGE.

78, 79. Conus Lienardi, Crosse and Bern. Thes. Suppl., t. 286, f. 612, 613, ... 60
80. Conus Macei, Crosse. Thes. Suppl., t. 287, f. 621, . 61
81. Conus Timorensis, Hwass. Reeve, Icon., f. 111, . 61
82. Conus Janus, Hwass. Thes. Conch., f. 478, . . 61
83. Conus Jickeli, Weink. Küster, Conch. Cab., t. 32, f. 11, 61
84. Conus inscriptus, Reeve. Conch. Icon., f. 164, . . 61
85. Conus Keatii, Sowb. (= inscriptus). Thes. Conch., f. 479, ... 61
86. Conus induratus, Reeve (= Erythræensis). Conch. Icon. Suppl., t. 7, f. 268, ... 62
87. Conus piperatus, Reeve (= Erythræensis). Conch. Icon., f. 230, ... 62
88. Conus quadrimaculatus, Sowb. (= Erythræensis). Thes. Conch. Suppl., t. 288, f. 638, ... 62
89. Conus concinnus, Sowb. (= Erythræensis). Thes. Suppl., t. 289, f. 646, ... 62
90. Conus puncticulatus, Hwass. Reeve, Icon., f. 116, . 62
91. Conus perplexus, Sowb. (= puncticulatus). Thes. Conch., f. 324, ... 62
92. Conus pustulatus, Kiener (= puncticulatus). Coq. viv., t. 101, f. 2, ... 62
93. Conus papillosus, Kiener (= puncticulatus). Coq. viv., t. 12, f. 4, ... 62
94. Conus pusio, Sowb. (= puncticulatus). Thes. Conch., f. 398, ... 62
95. Conus Duvali, Bern. (= puncticulatus). Jour. de Conch., 3 ser., ii, t. 13, f. 3, ... 62
96. Conus Hanleyi, Sowb. (= puncticulatus). Thes. Conch., f. 399, ... 62
97, 98. Conus columba, Hwass. Thes. Conch., f. 310, 311, 62
99. Conus Metcalfei, Angas (= Angasi, Tryon). Zool. Proc., 1877, t. 26, f. 13, ... 62
100. Conus Ximenes, Gray (= interruptus). Thes. Conch., f. 285, ... 63
1, 2. Conus mahogani, Reeve (= interruptus). Thes. Conch., f. 283, 284, ... 63

Plate 20.

3. Conus monilifer, Brod. (= interruptus). Thes. Conch., f. 380, ... 63
4. Conus tornatus, Brod. (= interruptus). Reeve, Icon., f. 68, ... 63
5. Conus Philippii, Kiener (= interruptus). Thes. Conch. f. 412, ... 63

Digitized by Google

FIGURE. PAGE.

6, 7. Conus catus, Hwass. Thes. Conch., f. 277, 278, . 63
8. Conus nigropunctatus, Sowb. (= catus, var.). Thes. Conch., f. 342, ... 63
9. Conus Adansoni, Lam. (= catus, var.). Thes. Conch., f. 286, ... 63
10. Conus eques, Brug. (= catus). Kiener, Iconog., t. 66, f. 1, ... 63
11, 12. Conus achatinus, Chemn. Thes. Conch., f. 335, 336, 64
13. Conus superstriatus, Sowb. Thes. Conch., f. 282, . 64
14. Conus monachus, Linn. Reeve, Conch. Icon., f. 122 *a*, 64
15. Conus purpurascens, Brod. Thes. Conch., f. 346, . 64
16. Conus neglectus, A. Ad. (= purpurascens). Thes. Conch., f. 404, ... 64
16 *a*. Conus Luzonicus, Sowb. (= purpurascens). Thes. Conch., f. 344, ... 64
17. Conus regalitatus, Sowb. (= purpurascens, var.). Thes., f. 345, ... 64
18. Conus testudinarius, Mart. Sowb., Thes., f. 348, . 65
19. Conus fulmen, Reeve. Sowb., Thes., f. 351, . . 65
20. Conus tribunus, Crosse. Jour. de Conch., 1865, t. 10, f. 2, ... 59
21. Conus catenatus, Sowb. (= interruptus). Zool. Proc., 1878, t. 48, f. 3, ... 63
22. Conus hyæna, Hwass. Sowb., Thes., f. 431, . . 65
23, 24. Conus Guiniacus, Hwass. Sowb., Thes., f. 434, 435, . 65
26. Conus Franciscanus, Hwass (= Mediterraneus). Thes. Conch., f. 315, ... 66

PLATE 21.

25. Conus Mediterraneus, Hwass, Thes. Conch., f. 437, . 66
27. Conus Bruguieri, Kiener (= Mediterraneus, var). Kien., Iconog., t. 56, f. 2, ... 66
28. Conus Jamaicensis, Sowb. (= Mediterraneus, var.). Thes. Conch., f. 439, ... 66
29. Conus Tamsianus, Dunker (= Mediterraneus, var.). Moll. Guin., t. 4, f. 23, ... 66
30. Conus cærulescens, Chemn. (= Mediterraneus, var.). Thes. Conch., f. 442, ... 66
31. Conus æmulus, Reeve (= Mediterraneus, var.). Conch. Icon., f. 256 *a*, ... 66
32. Conus altispiratus, Sowb. Zool. Proc., 1873, t. 15, f. 4, 66
33. Conus castus, Reeve. Thes. Conch., f. 405, . . 66
34. Conus Madurensis, Reeve. Conch. Icon., f. 237, . . 66
35. Conus Borbonicus, H. Ad. Zool. Proc., 1868, t. 28, f. 1, 67
36. Conus corallinus, Kiener. Iconog., t. 73, f. 2, . . 67

Digitized by Google

FIGURE. PAGE.

37. Conus inæqualis, Reeve (= corallinus). Conch. Icon. Suppl., t. 7, f. 270, ... 67
38. Conus dilectus, Gould. Moll. Wilkes Expl. Exped., f. 367, ... 67
39. Conus nitidus, Reeve. Thes. Conch., f. 401, . . 67
40. Conus aplustre, Reeve. Thes. Conch., f. 448, . . 67
41. Conus multicatenatus, Sowb. (= aplustre, var.). Thes. Suppl., f. 634, ... 67
42. Conus pictus, Reeve. Conch. Icon., f. 98, . . . 68
43. Conus jaspideus, Kiener (= pictus, Reeve). Iconog., t. 55, f. 4, ... 68
44. Conus scitulus, Reeve (= pictus, Reeve). Conch. Ic. Suppl., t. 9, f. 283, ... 68
45. Conus pauperculus, Sowb. Reeve, Conch. Icon., f. 108, 68
46. Conus lautus, Reeve. Sowb., Thes. Conch., f. 454, . 68
47. Conus elongatus, Chemn. Thes. Conch., f. 440, . . 68
48, 49. Conus caffer, Krauss. Sowb., Thes., f. 446, 447, . 68
50. Conus gilvus, Reeve (= caffer). Conch. Icon., Suppl., t. 6, f. 255, ... 68
51. Conus secutor, Crosse (= caffer). Jour. de Conch., 1865, t. 9, f. 3, ... 68

PLATE 22.

52. Conus Algoensis, Sowb. Reeve, Icon., f. 149, . . 69
53. Conus fucatus, Reeve. Thes. Conch., f. 308, . . 69
54. Conus lachrymosus, Reeve. Sowerby, Thes. Conch., f. 93, ... 69
55. Conus anemone, Lam. Sowb., Thes., f. 340, . . 69
56. Conus maculatus, Sowb. (= anemone). Thes. Conch., f. 296, ... 69
57. Conus Novæ-Hollandiæ, Lam. (= anemone). Thes. Conch., f. 298, ... 69
58. Conus Jukesii, Reeve (= anemone). Conch. Icon. Suppl., t. 2, f. 278, ... 69
59. Conus Cabritii, Bern. (= anemone). Thes. Conch. Suppl., t. 288, f. 632, ... 69
60. Conus compressus, Sowb. (= anemone). Thes. Suppl., t. 286, f. 603, ... 69
61. Conus anemone, Lam. Sowb., Thes., f. 339, . . 69
62. Conus cocceus, Reeve. Thes. Conch., f. 417, . . 70
63. Conus decrepitus, Kiener (= cocceus). Iconog., Coq. viv., t. 99, f. 4, ... 70
64. Conus cerinus, Reeve. Thes. Conch., f. 120, . . 70
65. Conus Vayssetianus, Crosse. Jour. de Conch., 1872, t. 16, f. 1, ... 70
66. Conus carnalis, Sowb. Zool. Proc , 1878, t. 48, f. 2, . 71

Digitized by Google

FIGURE. PAGE.
67. Conus Melvilli, Sowb. Zool. Proc., 1878, t. 48, f. 1, . 71
68. Conus Kieneri, Reeve. Conch. Icon., Suppl., t. 9, f. 282 *b*, ... 71
69. Conus latifasciatus, Sowb. (= Kieneri). Thes., f. 485, 71
70. Conus subulatus, Kiener. Reeve, Icon. Suppl., t. 4, f. 239, ... 71
71. Conus Neptunus, Reeve. Conch. Icon., f. 30, . . 72
72. Conus Neptunoides, E. A. Smith. Zool. Proc., 1880, t. 48, f. 2, ... 72
73. Conus mucronatus, Reeve. Conch. Icon., f. 204, . 72
74. Conus alabaster, Ads. and Reeve (= mucronatus). Reeve, Icon. Suppl., t. 6, f. 257, ... 72

PLATE 23.

75. Conus orbitatus, Reeve (= mucronatus, var.). Conch. Icon., f. 156, ... 73
76. Conus planiliratus, Sowb. Zool. Proc., 1870, t. 22, f. 1, 73
77. Conus australis, Chemn. Sowb., Thes., f. 486, . . 73
78. Conus laterculus, Sowb. (= australis). Zool. Proc., 1870, t. 22, f. 3, ... 73
79. Conus strigatus, Hwass. Reeve, Conch. Icon., f. 248, 73
79 *a*. Conus sulcatus, Hwass. Sowb., Thes., f. 30, . . 73
80. Conus undulatus, Sowb. (= sulcatus, var.). Thes. Conch., f. 63, ... 74
81. Conus Bocki, Sowb. (= sulcatus, var.). Zool. Proc., 1881, t. 56, f. 7, ... 74
82, 83. Conus granifer, Reeve. Sowb., Thes., f. 109, 110, 74
84. Conus exaratus, Reeve. Conch. Icon., f. 238. . . 74
85. Conus pulcher, A. Ad. Sowb., Thes., f. 121, . . 74
86. Conus sulciferus, A. Ad. Sowb., Thes., f. 122, . . 74
87. Conus cancellatus, Lam. Reeve, Icon. 74
88. Conus præcellens, Ad. (= cancellatus). Thes. Conch., f. 371, ... 74
89. Conus turriculatus, Sowb. (= cancellatus). Thes. Conch., f. 643, ... 74
90. Conus aculeiformis, Reeve. Conch. Icon., f. 240, . 75
91. Conus vimineus, Reeve (= aculeiformis). Conch. Ic. Suppl., t. 7, f. 269, ... 75
92. Conus gracilis, Sowb. (= aculeiformis). Zool. Proc., 1875, t. 24, f. 6, ... 75
93. Conus insculptus, Kiener (= aculeiformis). Coq. viv., t. 99, f. 2, ... 75
94. Conus longurionis, Kiener (= aculeiformis). Coq. viv., t. 92, f. 6, ... 75
95. Conus Orbignyi, Aud. Sowb., Thes. f. 368, . . 75

Digitized by Google

FIGURE. PAGE.
96. Conus gemmulatus, Sowb. (= Orbignyi). Zool. Proc., 1870, t. 22, f. 8, ... 75

PLATE 24.

97. Conus crenulatus, Kiener (= armiger, Crosse). Coq. viv., t. 109, f. 1, ... 75
98. Conus arcuatus, Sowb. Reeve, Icon., f. 77 *b*, . . 75
99. Conus undatus, Kiener. Coq. viv., t. 94, f. 1, . . 76
100. Conus subæqualis, Sowb. (= undatus). Zool. Proc., 1870, t. 22, f. 5, ... 76
1. Conus Sowerbyi, Kiener (= undatus). Reeve, Icon., f. 77 *a*, ... 76
2. Conus cingulatus, Lam. (= undatus). Reeve, Icon., f. 158, ... 76
3. Conus cingulatus, Lam. Sowb., Thes. Conch., f. 385, . 76
4. Conus Sinensis, Sowb. (= cingulatus, Lam.). Conch. Illus., f. 56, ... 76
5. Conus acutangulus, Hwass. Reeve, Conc. Icon., f. 200, 76
6. Conus Wilmeri, Sowb. Zool. Proc., 1882, t. 5, f. 5, . 77
7. Conus tenuisulcatus, Sowb. Zool. Proc., 1870, t. 22, f. 10, ... 77
8. Conus tristis, Reeve. Conch. Icon., f. 252, . . . 77
9. Conus Borneensis, Ads. and Reeve. Thes. Conch., f. 389, ... 77
10. Conus acutimarginatus, Sowb. (= Borneensis). Thes. Conch. Suppl., f. 640, ... 78
11. Conus Lizardensis, Crosse (= Borneensis). Thes. Conch. Suppl., f. 642, ... 78
12. Conus verrucosus, Hwass. Reeve, Icon., f. 201, . . 78
13. Conus echinulatus, Kiener (= verrucosus). Coq. viv., t. 105, f. 2, ... 78
14. Conus sticticus, A. Ad. (= verrucosus). Thes. Conch., f. 137, ... 78
15. Conus nodiferus, Kiener (= verrucosus). Coq. viv., t. 100, f. 4, ... 78
16. Conus Mindanus, Hwass (= verrucosus). Sowb., Thes., f. 86, ... 78
17. Conus cretaceus, Kiener (= verrucosus). Coq. viv., t. 99, f. 1, ... 78
18. Conus anaglypticus, Crosse (= verrucosus). Sowb., Thes. Suppl., f. 606, ... 78
19. Conus corrugatus, Sowb. Zool. Proc., 1870, t. 22, f. 7, 78
20. Conus coronatus, Reeve (= papalis, Weink.) Sowb., Thes., f. 136, ... 78
21. Conus semisulcatus, Sowb. Zool. Proc., 1870, t. 22, f. 13, 79

Digitized by Google

Plate 25.

FIGURE. PAGE.

22. Conus Caledonicus, Hwass. Sowb., Thes., f. 413, . 79
23. Conus nucleus, Reeve. Conch. Icon. Suppl., t. 3, f. 280, 79
24, 25. Conus luteus, Brod. Sowb., Thes. Conch., f. 544, 545, 79
26, 27. Conus glans, Hwass. Sowb., Thes., f. 530, 531, . 79
28. Conus tenuistriatus, Sowb. (= glans). Thes. Conch., f. 533, ... 79
29. Conus scabriusculus, Chemn. Sowb., Thes. Conch., f. 543, ... 80
30. Conus tendineus, Hwass. Thes. Conch., f. 534, . . 80
31. Conus terebra, Born. Sowb., Thes., f. 559, . . 80
32. Conus cœlebs, Hinds (= terebra). Reeve, Icon., f. 64, 80
33. Conus Thomasi, Sowb. (= terebra). Zool. Proc., 1881, t. 56, f. 4 *a*, ... 80
34. Conus Cailliaudi, Kiener. Iconog., Coq. viv., t. 55, f. 5, 80
35. Conus nussatella, Linn. Sowb., Thes., f. 533, . . 80
36. Conus tenellus, Chemn. Sowb., Thes., f. 556, . . 81
37. Conus clavus, Linn. Sowb., Thes., f. 561, . . 81
38. Conus dactylosus, Kiener (= clavus). Thes. Conch., f. 536, ... 81
39. Conus circumcisus, Born. Sowb., Thes., f. 562, . . 81
40. Conus Du Saveli, H. Ad. (= circumcisus). Zool. Proc., 1872, t. 3, f. 17, ... 81
41. Conus Brazieri, Sowb. Jour. of Conch., iii, t. 1, f. 9, . 81
42. Conus granulatus, Linn. Thes. Conch., f. 540, . . 81
43. Conus verulosus, Hwass (= granulatus). Thes. Conch., f. 541, ... 82
44. Conus coccineus, Gmel. Kiener, Coq. viv., t. 77, f. 3, . 82

Plate 26.

45. Conus filamentosus, Reeve. Sowb., Thes. Conch., f. 482, 82
46. Conus nimbosus, Hwass. Reeve, Conch. Icon., f. 66, . 82
47. Conus aurisiacus, Linn. Sowb., Thes., f. 501, . . 82
48. Conus Barthelemyi, Bern. Jour. de Conch., 3 ser., ii, t. 1, f. 12, ... 83
49, 50. Conus cylindraceus, Brod. and Sowb. Reeve, Icon., f. 84 *a*, *b*, ... 83
51. Conus mitratus, Hwass. Reeve, Conch. Icon., f. 100, 83
52. Conus Pupæformis, Sowb. (= mitratus). Zool. Proc., 1870, t. 22, f. 2, ... 83
53. Conus crebrisulcatus, Sowb. Thes. Conch., f. 321, . 83
54. Conus Traillii, A. Ad. Sowb., Thes., f. 322, . . 83
55. Conus puncturatus, Hwass. Thes. Conch., f. 104, . 83
56. Conus Africanus, Kiener. Coq. viv., t. 104, f. 2, . 84
57. Conus bulbus, Reeve (= Africanus, var.). Kiener, Iconog., t. 78, f. 3, ... 84

Digitized by Google

FIGURE. PAGE.

58. Conus Dupontii, Kiener (= Africanus, var.). Iconog., t. 61, f. 2, ... 84
59. Conus Grayi, Reeve (= Africanus, var.). Conch. Icon., f. 258 *a*, ... 84
60. Conus obtusus, Kiener (= Africanus, var.). Iconog., t. 109, f. 3, ... 84
61. Conus guttatus, Kiener (= Africanus. var.). Iconog., t. 105, f. 4, ... 84
62. Conus variegatus, Kiener (= Africanus, var.). Iconog., t. 106, f. 1 *a*, ... 84
62 *a*. Conus zebroides, Kiener. Iconog., t. 105, f. 5, . 84
63. Conus concinnus, Brod. (= concinnulus, Crosse). Reeve, Icon., f. 153, ... 85
64. Conus atramentosus, Reeve. Conch. Icon. Suppl., t. 7, f. 265, ... 85
65. Conus hieroglyphicus, Ducl. Reeve, Conch. Icon., f. 101 *a*, ... 85
66. Conus lugubris, Reeve. Conch. Icon. Suppl., t. 9, f. 279, ... 85
67. Conus striatus, Linn. Sowb., Thes. Conch., f. 557, . 85
68. Conus gubernator, Hwass. Sowb., Thes. Conch., f. 521, 86
69. Conus terminus, Lam. (= gubernator). Sowb., Thes., f. 523, ... 86

Plate 27.

1. Conus figulinus, Linn., var. chytreus, Melvill. From Drawing, ... 17
2. Conus arenatus, Hwass, var. mesokatharos, Melvill. From Drawing, ... 18
3. Conus marchionatus, Hinds, var. eudoxus, Melvill. From Drawing, ... 9
4. Conus spiroglossus, Desh. (= generalis . Sowb., Thes. Suppl., f. 626, ... 34
5. Conus tenuis, Sowb. (= mustelinus). Thes. Conch., f. 314, ... 40
6. Conus Ceciliæ, Chenu (= mustelinus, var.). Jour. de Conch., vii, t. 14, f. 9, ... 41
7. Conus inflatus, Sowb. (= conspersus). Conch. Ill., f. 41, ... 58
8. Conus interruptus, Brod. Reeve, Icon., f. 125, . . 63
9. Conus comptus, Gould (= purpurascens). Mex. Shells., t. 14, f. 23, ... 64
10. Conus ocalaris, Val. (= arcuatus). Kiener, t. 88, f. 5, 76
11. Conus miles, Linn. Gould, Wilkes Exped., f. 364, . 40
12. Conus militaris, Hwass. Gould, Wilkes Exped., f. 362, 21
13. Conus Hebræus, Linn. Quoy, Voy. Astrol., t. 52, f. 5, 20

Digitized by Google

Plate 28.

FIGURE.		PAGE.
70.	Conus Boivini, Kiener. Sowb., Thes., f. 496,	86
71.	Conus melancholicus, Lam. Sowb., Thes., f. 547,	86
72.	Conus rhododendron, Jay. Sowb., Thes., f. 504,	86
73.	Conus floccatus, Sowb. Thes. Conch., f. 500,	86
74.	Conus Magdalenæ, Kiener (= floccatus). Iconog., t. 69, f. 4.	87
75.	Conus Julii, Lienard. Jour. de Conch., 1871, t. 1, f. 6,	87
76.	Conus floccatus, Kiener (= Julii). Iconog., t. 106, f. 3,	87
77.	Conus bullatus, Linn. Sowb., Thes., f. 550,	87
78.	Conus cervus, Lam. Sowb., Thes., f. 548,	87
79.	Conus Deshayesii, Reeve (= cervus, var.). Sowb., Thes. Conch., f. 546,	87
80.	Conus tulipa, Linn. Sowb., Thes., f. 552,	87
81.	Conus floridus, Sowb. (= tulipa). Thes. Conch., f. 558,	88
82.	Conus violaceus, Reeve. Conch. Icon., f. 241,	88
83.	Conus obscurus, Reeve (= violaceus). Conch. Icon., f. 82,	88
84.	Conus geographus, Linn. Sowb., Thes., f. 560,	88

Plate 29.

85.	Conus intermedius, Reeve (= geographus, var.). Sowb., Thes., f. 549,	88
86.	Conus aureus, Hwass. Reeve, Conch. Icon., f. 196,	88
87.	Conus Paulucciæ, Sowb. Zool. Proc., 1876, t. 75, f. 3,	89
88.	Conus pyramidalis, Lam. Kiener, Iconog., t. 85, f. 1,	89
89.	Conus convolutus, Sowb. (= pyramidalis). Thes., f. 564,	89
90.	Conus gloria-maris, Hwass. Thes. Conch., f. 586,	89
91.	Conus solidus, Sowb. (= retifer, Mke.). Reeve, Icon., f. 23 *b*,	89
92, 93.	Conus textile, Linn., Operculum. Jour. de Conch., t. 13, f. 2, 1874,	89
94.	Conus textile, Linn. Quoy, Voy. Astrol., t. 53, f. 16,	89
95.	Conus vicarius, Lam. (= textile). Sowb., Thes., f. 565,	90
96.	Conus scriptus, Sowb. (= textile). Thes. Conch., f. 563,	90
97.	Conus telatus, Reeve (= textile, var.). Sowb., Thes., f. 584,	90
98.	Conus tigrinus, Sowb. (= textile, var.). Thes., f. 569,	90
99.	Conus verriculum, Reeve (= textile, var.). Sowb., Thes., f. 570,	90

Plate 30.

100.	Conus euetrios, Sowb. (= textile, var.). Zool. Proc., t. 5, f. 6, 1882,	90

Digitized by Google

FIGURE. PAGE.

1. Conus archiepiscopus, Hwass (= textile, var.). Sowb., Thes., f. 571, ... 90
2. Conus canonicus, Hwass (= textile, var.). Sowb., Thes., f. 568, ... 90
3. Conus Madagascariensis, Sowb. (= textile, var.). Thes. Conch., f. 582, ... 90
4. Conus condensus, Sowb. (= textile, var.). Thes. Suppl., t. 287, f. 622, ... 90
5. Conus legatus, Lam. (= textile, var.). Reeve, Conch. Icon., f. 85, ... 90
6. Conus Victoriæ, Reeve (= textile, var.) Conch. Icon., f. 202 *a*, ... 91
7. Conus complanatus, Sowb. (= textile, var.) Thes. Suppl., t. 289, f. 651, ... 91
8. Conus Prevosti, Sowb. Zool. Proc., 1881, t. 56, f. 3, . 91
9. Conus concatenatus, Kiener. Coq. viv., t. 110, f. 1, . 91
10. Conus Dalli, Stearns. Cal. Proc., v, t. 1, f. 1, . . 91
11. Conus reticulatus, Sowb. (= lucidus, Mawe). Reeve, Icon., f. 52, ... 91
12. Conus abbas, Hwass. Sowb., Thes. Conch., f. 575, . 92
13. Conus panniculus, Lam. (= abbas, var.) Sowb., Thes., f. 574, ... 92
14. Conus corbula, Sowb. (= abbas, var.) Thes. Conch., f. 573, ... 92
15. Conus Elizæ, Kiener. Iconog., t. 64, f. 1 *a*, . . 92

PLATE 31.

16, 17. Conus crocatus, Lam. Sowb., Thes. Conch., f. 588, 589, ... 92
18. Conus racemosus, Sowb. Zool. Proc., 1873, t. 59, f. 11, 92
19. Conus omaria, Hwass. Sowb., Thes., f. 594, . . 92
20, 21. Conus pennaceus, Born (= omaria). Sowb., Thes., f. 599, 600, ... 93
22. Conus prælatus, Hwass (= omaria). Sowb., Thes., f. 595, 93
23, 24. Conus episcopus, Hwass (= omaria). Sowb., Thes., f. 596, 598, ... 93
25. Conus rubiginosus, Hwass (= omaria). Sowb., Thes. Conch., f. 590, ... 93
26. Conus magnificus, Reeve (= omaria). Sowb., Thes., f. 592, ... 93
27. Conus stellatus, Kiener (= omaria). Iconog., t. 99, f. 3, 93
28. Conus colubrinus, Lam. (= omaria). Kiener, Iconog., t. 82, f. 3, ... 93
29. Conus aulicus, Linn. Thes. Conch., f. 593, . . 93
30. Conus auratus, Lam. (= aulicus). Thes. Conch., f. 591, 93

Digitized by Google

8638
June 17. 1884.

MANUAL

OF

CONCHOLOGY;

STRUCTURAL AND SYSTEMATIC.

WITH ILLUSTRATIONS OF THE SPECIES.

BY GEORGE W. TRYON, JR.

CONSERVATOR OF THE CONCHOLOGICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

VOL. VI. N°. 3.

Part .....

PHILADELPHIA:

Published by the Author,

ACADEMY OF NATURAL SCIENCES, COR. 19TH & RACE STS.

Digitized by Google

ADVERTISEMENT.

I propose to compile a Conchological Manual, which, whilst more comprehensive than any similar work hitherto published, shall be so condensed in text and illustration that it may be issued at a much more moderate price. It will include, in systematic order, the diagnoses of all the genera and higher divisions of the mollusca, both recent and fossil, and the descriptions and figures of all the recent species; together with the main features of their anatomy and physiology, their embryology and development, their relations to man and other animals, and their geological and geographical distribution.

The material at my disposal for the purpose of working up this comprehensive plan is ample and unexcelled:

I.—The Library of the Academy of Natural Sciences of Philadelphia contains almost every separate work ever published upon the subject, together with the various volumes of voyages and travels, of general natural history, and especially scientific periodicals, and the published transactions of learned societies throughout the world. For Conchological purposes this library is almost complete, and it is very rarely that its shelves do not afford any reference desired.

II.—The Conchological Museum of the same institution ranks among the largest in the world in the number of species represented, whilst in the richness of its geographical suites, the number of specimens illustrating varietal forms, etc., it is probably the finest collection extant.

It is intended to arrange and describe the valid species in accordance with their inter-relationships, and it is hoped that by so doing their number may be greatly reduced. Every genus and every recent species will be fully illustrated, so far as specimens or hitherto published figures will enable me to do so. The experienced skill of the artists who have undertaken to furnish the illustrations (of which 30,000 to 40,000 will be required), will sufficiently guarantee the accuracy of this department of the Manual.

In the preparation of the text every care will be taken to discover and correct, and to avoid, error; but it may be reasonably apprehended that the performance of such an immense work must be in many respects inferior to

Digitized by Google

Family *PLEUROTOMIDÆ.*

Shell fusiform, with a more or less produced anterior canal, and a slit or sinus of the outer margin of the aperture near the suture. Operculum (not always present) corneous, annular, the nucleus apical, or subcentral and nearly marginal.

Animal with widely separated tentacles, the eyes usually at or near their base; mantle generally with a sinus on the right margin corresponding with the sinus of the shell; siphon long. Dentition: usually there are no central teeth, and the laterals are a single one on either side of the lingual band (1–0–1); but in some groups there is a central tooth, and in others there are two laterals. No jaws.

The dentition, however it varies in minor respects, always preserves a resemblance to that of the Conidæ, Terebridæ and Cancellariidæ sufficient to include it with these in a great group Toxoglossa. The teeth are long, usually subulate, supplied with venom from a large gland (Pl. 33, fig. 52).

There is some resemblance in the sinus of the shell between Conus and the principal groups of Pleurotomidæ; and even in form, Genotia is connected, through Conorbis, with Conus. On the other hand Pusionella seems to form the connecting link with Terebra, Halia with Cancellaria, etc.

In no other group of mollusks is it so difficult to make a satisfactory classification as in the Pleurotomidæ. The forms are exceedingly numerous, and known in many species to be very variable in their characters, whilst the material for the recognition of most of those described is generally scanty. Of the figured species, a very large proportion were described from single or few specimens, and most cabinets, however large, do not possess shells which can be certainly identified with these: then there is an unusually large proportion (amounting to hundreds) of unfigured species, the recognition of which is simply impossible.

The many generic and subgeneric groups that have been made, far from enabling us to arrange the species in something like systematic order, only increase the confusion; for so great is the variability of all the characters that nearly allied species have

Digitized by Google

been constantly separated into different groups; and of a large proportion of the species, the proper relationships have not and cannot be worked out from accessible material. In no other family of shells have these groups been so hastily proposed or with so little data upon which to found them; yet so generally have they been adopted that to destroy ill-founded groups and unite the species under the one generic name Pleurotoma, would cause such a large duplication of specific names, and consequently so much alteration of these latter, that it appears better, in the interest of science, to retain some of these genera.

In the "Structural and Systematic Conchology" I have recorded thirty-three groups, sections or subgenera under the genus Pleurotoma, and without indicating any difference of rank or grade among these; here I shall be compelled to arrange them into subfamilies, genera, subgenera and sections, supplied with characters only exhibited by selected typical species, and even in these of much inferior importance to those upon which similar divisions are founded in most other families of mollusks. The three subfamily characters, the presence or absence of an operculum, and the position of the nucleus when the operculum is present, would be far from having similar rank in many other families of marine mollusks; it only needs to refer to the Muricidæ, Tritonidæ, etc., where the position of the nucleus is considered of only subgeneric importance; to the Buccinidæ, in one genus of which the operculum is indifferently absent or present in the same species. This character becomes of still less value to us because the operculum has so seldom been preserved that in more than half of the species it has neither been figured nor described; and because there are no other characters from which that of the operculum can be predicated.

In "Structural and Systematic Conchology," vol. ii, p. 50, will be found Dr. Gray's account of the reproduction of a lost portion of an operculum in *Pleurotoma babylonica;* the operculum which normally has an apical nucleus, by this restoration having concentric lamellæ from the middle.

The other systematic characters—the length of the canal, position of the sinus, surface of the embryonic whorls, sculpture, etc.—are equally unreliable. It is not surprising that in groups so vaguely defined the personal equation should be more than

Digitized by Google

usually apparent in the classification; so that in studying a group of Pleurotoma it is as absolutely necessary to know how each author who has described species as of that group, comprehended its characters, as it is to refer to the diagnosis itself.

The systematic works on the Pleurotomidæ are few and very incomplete. They include the following monographies:—

Kiener, Iconographie des coquilles vivantes, 27 plates, illustrating 57 species.

Reeve, Monograph of Pleurotoma. Conchologia Iconica, 369 species.

Reeve, Monog. of Mangilia. Conch. Icon., 71 species.

Weinkauff, in Küster's Conchylien Cabinet, 172 species. This work is in course of publication, but no portion of it has appeared for a considerable period.

Dr. Weinkauff has also catalogued the species of some of the groups in Jahrbücher der Deutschen Malak. Gesell., iv, 1877.

The principal classifications of the family are those of—

H. and A. Adams, Genera of Recent Mollusca, i, 88, . 1853
Bellardi, Moll. Tert. du Piemonte, pt. 2, ... 1877
Weinkauff, Jahrb. Deutsch. Mal. Gesell., iii, 1, . . 1876
Tryon, Structural and Systematic Conchology, ii, 183, . 1883
Fischer, Manuel de Conchyliologie, 589, ... 1884

Differing in detail, the three latter are essentially founded upon that of Messrs. Adams.

Living species of Pleurotomidæ are found in all seas; nevertheless certain groups are restricted in distribution, Pleurotoma being tropical and subtropical, Bela boreal, etc. The family is geologically modern, but was very numerously represented in tertiary beds, particularly those of northern Italy.

Family *PLEUROTOMIDÆ*.

Subfamily *Pleurotominæ*. Operculum oval, with terminal nucleus.

Subfamily *Clavatulinæ*. Operculum pyriform, with lateral, internal nucleus.

Subfamily *Mangiliinæ*. No operculum.

Digitized by Google

Synopsis of Genera.

I. *Pleurotominæ.*

Genus PLEUROTOMA, Lamarck, 1799.

Shell turriculated, fusiform; spire long, sharp; aperture ovate, the columellar margin smooth, the outer lip with a narrow profound sinus separated rather distantly from the suture; canal long and narrow, straight, open.

Animal, foot truncated anteriorly, obtuse posteriorly; tentacles cylindrical, with eyes externally near their base; teeth falciform, angulated (1–0–1). Dentition, Pl. 33, fig. 54. Generally large shells variegated with spots. *Inhabiting warm seas.* Fossil, tertiary.

Subgenus GEMMULA, Weinkauff, 1875.

Shell spindle-like, canal rather long and narrow, sometimes curved; sinus straight, more or less narrow and long, terminating a nodulous peripheral keel; embryonal whorls three or four, the two upper ones smooth, upright, the others longitudinally ribbed.

Consists of a few species having upright embryonal whorls, these being inclined in Pleurotoma.

Genus GENOTIA, H. and A. Adams, 1853.

Shell narrowly obconic, cancellated, body-whorl gradually tapering to a but slightly developed canal; lip-sinus wide and shallow; aperture long and narrow, with subparallel margins. Operculum unguiculate.

Animal resembling Conus.

The name is derived from Génot, by which Adanson called the type species. *W. Coast of Africa.*

Pseudotoma, Dolichotoma, Oligotoma and Rouaultia of Bellardi and Cryptocónus, Koenen, are sections containing European tertiary species. Their characters are not important.

Genus COLUMBARIUM, E. von Martens, 1881.

Shell fusiform, carinated, spiny; embryonic tip of the spire globular; aperture short, oval; sinus of the lip scarcely indicated by a slight curve; canal narrow, very long. *W. Australia, China, Panama.* The group is placed here by von Martens on account

Digitized by Google

of the lingual dentition; conchologically the species belong in Fusus.

Genus ANCISTROSYRINX, Dall, 1881.

Whorls concave below the suture; with a wide deep sinus, bordered externally by an elevated frill directed backwards. Operculum and dentition not described. Only a single species known, and its systematic position very uncertain.

Genus DRILLIA, Gray, 1838.

Shell turriculated, with longitudinal ribs, and usually revolving striæ; last whorl usually short; spire elevated; columella with a posterior callus; outer lip thick, but not varicose, nor dentate within, flexuous, with a well-marked posterior sinus near (but not reaching) the suture, and an anterior constriction or sinuosity; canal short, curved, usually narrow.

Principally distinguished from Pleurotoma by the smaller size and short recurved canal.

Animal with tentacles approaching at their bases and eyes near their extremities.

Distr.— Warm Seas. Fossil, cretaceous, U. S.; miocene, Eur. The following, generally regarded as subgenera, will be treated as sections in this work:—

Section CRASSISPIRA, Swainson, 1840. Shell somewhat claviform, tuberculated; anterior canal very short; inner lip with a thick posterior callus; outer lip thick within.

Section CONOPLEURA, Hinds, 1844. Shell coniform; aperture narrow, sinuous; columellar lip callous, canal very short; outer lip sinuous, with a profound lateral sinus.

Section CLAVUS, Montfort, 1810. Tuberculated or spiny; aperture rather large; outer lip produced below the sinus.

Section BRACHYTOMA, Swainson, 1840. Shell strombiform; columellar lip rather thick; outer lip ascending and forming a canal-like sinus near the suture.

Genus SPIROTROPIS, Sars., 1878.

Shell turriculated, rather thin; apex obtuse; whorls carinated, sinus profound, distant from the suture. Operculum normal. Dentition (Pl. 33, fig. 53) very distinct; formula 1–1–1–1–1.

Digitized by Google

Genus BELA (Leach), Gray, 1847.

Shell usually thin and white, fusiform; spire elongated, turreted; canal short, straight, truncated below; columella simple, flattened; lip thin, the sinus absent or barely indicated. Operculum oval, pyriform, with apical nucleus.

Foot truncated or bilobed in front, drawn out behind; tentacles cylindrical, rather short, the eyes external at the middle or three-fourths of their length. Teeth straight (1–0–1); Plate 33, figs. 55, 52.

Distr.—Northern Seas.

The following may be considered sections:—

Section TYPHLOMANGILIA, Sars., 1878. Animal blind.

Section HÆDROPLEURA, Monterosato, 1883. Shell not turriculated, with a few strong longitudinal ribs. *Mediterranean.*

Section ETALLONIA, Desh., 1862. This eocene group is here included by Dr. Fischer. I have placed it in the family Aplustridæ (S. and S. Conch., ii, 362).

Subgenus BELOMITRA, Fischer, 1882.

Shell elongated, with mammillary apex; aperture oblong; lip sinuous, slightly concave towards the suture; columellar lip with several small but strong plications; canal short. Operculum with apical nucleus.

Genus LACHESIS, Risso, 1826.

Shell small, strong, turreted, many-whorled, the last whorl not very large; surface sculptured by longitudinal ribs and revolving striæ; apex mammillated; aperture oval; canal very short, straight, not recurved; outer lip slightly thickened externally, crenated within, without apparent sinus. Operculum unguiculate.

Animal with diverging tentacles, short siphon, and short ovate foot; the eyes on stalks connate with, and at half the length of the tentacles.

I retain the above name, although previously used by Daudin in reptilia and by Savigny in arachnida. One of its synonyms, Nesæa, Risso, was also used by Lamarck for a genus of Polyps, and by Leach in crustacea. On these accounts the group has

Digitized by Google

been recently rechristened Donovania, but it appears unnecessary to make any change.

Genus BORSONIA, Bellardi, 1846.

Shell fusiform, spire elevated; canal well-marked; columella with one or two strong plications; sinus of the outer lip not deep, opening in the infrasutural depression of the body-whorl.

Abyssal zone, West Indies and Brazil. Fossil, tertiary of Europe and America.

Described from a fossil group having a single columellar plait, but Cordiera, Rouault (= Scobinella, Conrad), having two plaits, is usually considered identical, as in examples of some species one or two plaits appear to be indifferently developed.

II. *Clavatulinæ.*

Genus CLAVATULA, Lamarck, 1801.

Shell fusiform, with well-produced spire, the whorls coronated with tubercles or short spines at the suture; aperture oval; columellar lip smooth, arcuate, callous behind; outer lip thin, arcuated, with the sinus situated below the sutural coronal. Operculum semioval, the nucleus about the middle, on the inner side.

Foot large, short, obtuse behind; eyes placed externally near the extremity of the tentacles. Dentition: a small unicuspid central tooth with single sharp laterals (1–1–1).

The species mostly inhabit the west coast of Africa; they also occur in the tertiary of Europe.

Subgenus PERRONA, Schumacher, 1817 (Tomella, Swains., 1840).

Spire carinated or smooth, whorls not tubercular or spinose; sinus more or less near the suture.

Subgenus CLIONELLA, Gray, 1847.

Shell narrowly bucciniform, turriculated, whorls somewhat flattened, longitudinally ribbed, having a thick epidermis; spire elevated; canal scarcely indicated at the broad base of the aperture; lip with a small infrasutural sinus. Operculum with lateral nucleus.

Digitized by Google

Foot short, broad, rounded behind; eyes near the tips of the tentacles. Dentition (1–1–1), Pl. 33, fig. 58.

Supposed to be a fluviatile species, allied to Melanopsis, which it superficially resembles, the marine habitat and family relations of Clionella were first pointed out by Stimpson (Am. Jour. Sci., 2d ser., xxxviii, 48; Am. Jour. Conch., i, 62). He unnecessarily made a new family, Clionellidæ, for it, and for the slightly different type of dentition proposed Tomoglossata.

Genus PUSIONELLA, Gray, 1847.

Shell fusiform, solid, smooth, shining; whorls numerous; spire sharp; lip without sinus; canal short, exteriorly carinated at the base; columella twisted anteriorly. Operculum with lateral nucleus.

Eyes at the external bases of the tentacles. *W. Coast of Africa.*

The smooth shining whorls and form of the spire resemble Terebra, but the body-whorl is proportionally larger and wider than in that genus, and more contracted below, and the spire is much shorter. Differs from Terebra also in the position of the eyes, which are terminal in the latter. It may readily be distinguished from Clavatula by its smooth surface and the absence of a sinus of the lip.

Genus SURCULA, H. and A. Adams, 1853.

Shell turriculated, fusiform; spire long; lip-sinus in the infrasutural depression above the peripheral carina; canal long, slightly bent. Operculum with medio-lateral nucleus.

Animal with eyes at the base of the tentacles. Dentition (1–0–1), Pl. 33, fig. 59.

Distr.—Warm Eastern Seas.

The tertiary groups Clinura, Brocchi (Europe), and Surculites, Conrad (United States), may be here included.

III. *Mangiliinæ.*

Genus MANGILIA, Risso, 1826.

Dedicated to the Italian naturalist, Mangili. Not Mangelia, as usually written.

Shell fusiform, imperforate; aperture oval-elongated, usually

Digitized by Google

narrow, terminating in a rather short, truncated canal; lip-sinus near the suture. No operculum.

Foot dilated in front, and attenuated behind; eyes placed on peduncles connate with the tentacles, and at about the middle of the latter, and exterior. Teeth hastiform (1–0–1).

The animal of Mangilia is slow in its movements. It can sustain itself at the surface of the water, shell downwards. The oviposit consists of membranous hemispherical capsules, having a central opening, ordinarily attached to the interior of old bivalve shells. Each capsule contains from 200 to 300 eggs (Jeffreys, Brit. Conch., iv).

The great number of small species, inhabiting all portions of the globe, which have been referred to Mangilia, may be conveniently divided into the following sections:—

Section MANGILIA (restricted). Shell longitudinally costulate; aperture narrow; lip varicose; sinus well marked; canal short.

Section CYTHARA, Schum., 1817 (not Klein, 1753 = Harpa. Otocheilus, Conr.; Cytharella, Monteros; Eucithara, Fischer, 1883). Shell Columbelliform, longitudinally costellated; spire short; aperture narrow; outer lip denticulated within; columellar lip striated.

Section CYTHAROPSIS, A. Adams, 1865 (not Citharopsis, Pease = Columbellidæ). Whorls of the spire cancellated; columella sillonated; canal curved, elongated.

Section GLYPHOSTOMA, Gabb, 1872. Shell fusiform; columellar lip plicated throughout; outer lip thickened, plicate within; sinus profound; canal long, somewhat bent.

Founded on a West Indian tertiary fossil, but some living species are referred to the group.

Genus CLATHURELLA, Carpenter, 1857 (Defrancia, Millet, 1826.)

Apex mammillary; sinus varicose, sutural; columella tuberculated posteriorly, rugose in front; canal slightly curved. Dentition, Pl. 33, figs. 56, 57. Defrancia was preoccupied by Bronn for a genus of Polyzoa; but that is said to be a synonym of Pelagia, Lamouroux; so that perhaps it ought to be restored for the mollusks. Clathurella appears to differ from Mangilia principally in its more rounded whorls, and cancellated sculpture.

Digitized by Google

It is retained as a genus to prevent the duplication of specific names.

Ditoma and Atoma, Bellardi, are groups found in the Italian tertiary which may be here referred.

Genus DAPHNELLA, Hinds, 1844.

Shell thin, fragile, oval-fusiform; whorls convex; body-whorl elongated, surface finely cancellated; aperture oval; lip simple, not varicose, arcuated; canal very short. *Warm Seas.*

Small and elegant shells, of slight texture, distinguished by their elongated body-whorl, tenuity and sculpture.

The following may be considered sections of Daphnella:—

Section RAPHITOMA, Bellardi, 1847. Shell small, fusiform, or turriculated, with longitudinal sculpture; lip sinuous behind, but without well-defined sinus. There are a number of tertiary species.

Section HOMOTOMA, Bellardi, 1875. Whorls canaliculated at the suture. Tertiary only.

Section TERES, Bucq., Dautz. and Dollf., 1882. Shell fusiform; spire long; sinus profound; columella straight, obliquely truncate at the base.

Section BELLARDIELLA, Fischer, 1883 (Bellardia, Bucq., Dautz. and Dollf., 1882, *non* Mayer, 1870). Form lanceolate, similar to that of the true Pleurotomas; sinus sutural; canal rather long.

Section ZAFRA, A. Adams, 1872. Shell acuminately oval, tumid in the middle; whorls longitudinally plicate, the last constricted at the base; aperture linear; inner lip effuse, its margin free; outer lip acute, subsinuous behind, subinflected in the middle.

Seminella, Pease, which has by some been considered identical with Zafra, appears to me to be Columbelloid, and I have so treated it in vol. v of this work.

Section THESBIA, Jeffreys, 1867. Shell thin, rather smooth, somewhat tumid, with a short spire and irregularly contorted apex; aperture slightly expanded, the outer lip thin, with distinct sinus; canal short; columella simple.

Section TARANIS, Jeffreys, 1870. Shell minute, cancellated, whorls angulated; slightly exserted at base; aperture pyriform; outer lip thin, simple; sinus obsolete; canal short.

Digitized by Google

Section PLEUROTOMELLA, Verrill, 1873. Shell somewhat turreted; apical whorls smooth; the others shouldered and ribbed, but with a smooth concave surface above the shoulder; lip-sinus wide, very deep; canal short. Animal blind.

Section MITROMORPHA, A. Adams, 1865. Shell small, Mitriform, with revolving liræ, and sometimes longitudinally plicate; columella straight, bearing a number of short plicæ or teeth upon it; lip acute, smooth within, scarcely sinuated posteriorly. *California, Japan.*

This group has sometimes been referred to Mitra (see Manual, iv, 145), but the armament of the columella is not always present, and when it is, it more resembles a set of small callous deposits than revolving plicæ.

Subgenus APHANITOMA, Bellardi, 1875.

Shell fusiform; sinus scarcely apparent; columella nearly straight, biplicate; canal rather short, slightly curved. Tertiary only. *Europe.*

Genus HALIA, Risso, 1826.

Shell oval-oblong, ventricose, thin, fragile, shining, smooth; spire obtuse; aperture oval; columella truncated at the base; lip simple, arcuated, slightly sinuous.

One living species, *Atlantic near Cadiz, and N. W. Africa;* fossil, a species in the pliocene of N. Italy.

The classification of this mollusk has a long and interesting history, which is given with some detail in a paper by Dr. Paul Fischer, entitled "Monographie du genre Halia Risso (Priamus Beck)," published in Journal de Conchyl., 2d ser., iii, 141. There was great uncertainty until within comparatively recent times, as to its habitat—whether terrestrial or marine, and the animal remained unknown until 1858. Various ancient authors classed it successively as a Helix, Buccinum, Bulla, Bulimus, Achatina (Lamarck), Cochlicopa (Pfeiffer: Helicidæ).

In 1838, Deshayes published the genus Priamus, Beck, and made it an operculated marine shell between Buccinum and Struthiolaria; and since that period and up to 1858 the shell has been generally classed in the neighborhood of the Strombs or Buccinidæ.

Hermannsen, in 1846, discovered that Priamus was identical

Digitized by Google

with a genus described by Risso in 1826, founded upon a tertiary fossil long known to science as *Bulla helicoides*, and which he called Halia.

The animal of Halia possesses a voluminous, much thickened foot, oval-oblong, rounded at the extremities; without operculum; the mantle is well developed, but thin, its free margin finely papillary, its left margin partially covering, with a duplicature, the columella of the shell; tentacles very large, conical, flattened; eyes on the tentacles, at about a quarter of their length from the base; siphon well developed; dentition (1–0–1), the teeth or spinules laid diagonally forward from the unarmed central portion, to the margin on either side, and the lingual plate being very narrow in proportion to its length (Pl. 33, fig. 51).

The fragility of the shell and its rare occurrence caused Fischer to suppose that it inhabits the tranquil depths of the sea, and since his paper the deep-sea explorations have shown that his surmise was correct. The length of the proboscis, the slight development of lingual armor, and the long intestinal canal, indicate an animal phytophagous in habit, or if zoophagous, living upon fragile organisms, or those partly decomposed.

I. *Pleurotominæ.*

Genus PLEUROTOMA, Lam.

Typical.

Pictæ. Shell brown-spotted on the revolving ribs.

A. *With long, straight canal.*

P. BABYLONIA, Linn. Pl. 1, figs. a–c, 1, 2; Pl. 2, fig. 4.

Shell with somewhat angular whorls, caused by the greater prominence of one of the revolving ribs; sculpture large revolving ribs, with intermediate raised lines; whitish, with large dark brown or nearly black spots upon the ribs. L. 85, diam. 23 mill.

Philippines, Moluccas, New Guinea, Timor, Mauritius.

In *P. spectabilis*, Reeve (fig. 2), the canal is shorter, as is also the lip-sinus, and the shell is more or less distinctly fasciate with orange-brown, next the sutures, and also upon the lower part of the body-whorl. The specimens before me indicate a transition from this to the typical form, so that *spectabilis* can scarcely claim varietal rank. *P. venusta*, Reeve (Pl. 2, fig. 4), described

Digitized by Google

from a unique specimen in the Cumingian collection, from the Philippines, is also a synonym.

P. GARNONSII, Reeve. Pl. 2, fig. 5.

Shell narrower than the preceding species, with narrower and sharper revolving ribs; above the sinus these are mostly replaced by several revolving raised lines; whitish or yellowish white, with small brown spots on the principal ribs, larger oblique brown patches below the sutures, and on the body-whorl near the top of the canal—the latter are frequently confluent into a broad, more or less interrupted band. L. 3 inches, diam. ·8 inch.

Red Sea, East Africa, Mauritius, Java.

P. babylonia, var. of Kiener = this species.

P. RAFFRAYI, Tapparone-Canefri. Pl. 1, fig. 3.

Shell spotted at the sutures, otherwise ornamented with longitudinal brown flammules. L. 70, diam. 18 mill.

New Guinea.

The spots on the ribs have, in this form, coalesced into longitudinal stripes. One of my specimens of *P. Garnonsii* exhibits a tendency towards this ornamentation, and I do not think that the present species has much claim to recognition.

P. GRANDIS, Gray. Pl. 1, figs. 6, 7.

Whorls not much angulated, with sculpture of many rather small sharp revolving ribs and intermediate raised lines; yellowish white, numerously spotted with chestnut-brown upon the larger ribs, the spots often coalescing into irregular longitudinal stripes. L. 6 inches, diam. 28 mill.

China Sea, Viti Islands.

P. crispa, Lam. (fig. 6), can only be considered a younger state of this species, and, of course, has priority of description; but Gray's name is so appropriate to the largest species of the genus, and is so well-known, that it had better remain undisturbed.

P. PICTA, Beck. Pl. 2, fig. 19; Pl. 1, fig. 8.

Shell somewhat more carinated than *P. grandis*, with less numerous ribs, more sparingly painted with brown spots.

L. 93, diam. 20 mill.

West Coast of Central America, Gulf of California.

Digitized by Google

The dimensions are taken from *P. Rombergi*, Mörch (fig. 8), which is merely a larger example of *P. picta*.

P. TIGRINA, Lamarck. Pl. 2, fig. 10.

Shell with sharply carinated whorls, the carina consisting of a pair of narrow ribs; whole surface with close, raised revolving lines, of which two or three below the carina are more prominent; whitish, minutely numerously brown-spotted, with usually a row of larger spots below the suture. L. 65, diam. 20 mill.

Philippines (Cuming), *Viti Islands* (Garrett).

P. JICKELII, Weinkauff. Pl. 2, fig. 11.

Shell less carinated, with more rounded revolving ribs than the preceding species, with large spots at the sutures and smaller ones elsewhere, coalescing into longitudinal streaks.

L. 53, diam. 13 mill.

Red Sea.

A species having no strongly marked characters, and perhaps only a variety of *P. Garnonsii*, between which and *P. tigrina* it appears to form a connecting link in its general appearance—although there are minor points of difference from both of them.

P. PICTURATA, Weinkauff. Pl. 2, fig. 12.

Shell bluntly carinated by a pair of approximated revolving ribs, with numerous smaller but unequal ribs; white, with chestnut spots, sometimes coalescing into longitudinal stripes, and a row of larger spots at the suture; the canal is much shorter than in any of the preceding species. L. 43, diam. 12–14 mill.

Indian Ocean.

Confounded by Reeve with *P. variegata*, Kiener.

P. VARIEGATA, Kiener. Pl. 2, fig. 13.

Shell scarcely carinated by a single revolving rib, above and below which are two revolving threads, and then covering the balance of the body-whorl, alternate small ribs and threads, the former spotted with chestnut-brown; canal rather wide, and of moderate length. L. 82, diam. 22 mill.

Indian Ocean, Philippines, Japan.

Not so sharply keeled, with shorter, wider canal, and wanting the duplicated keel-rib of *P. tigrina;* the want of duplication in

Digitized by Google

the keel-rib, and somewhat larger size and proportionally longer canal will distinguish it from the last species.

P. ALBINA, Lamarck. Pl. 2, fig. 14.

Keel-rib flattened, bearing a row of equidistant, somewhat quadrangular brown spots, the rest of the surface very minutely and numerously punctate with brown. L. 58, diam. 15 mill.

Moluccas.

The conspicuous painting on the slit-band, contrasted with the very minute sprinkling of brown dots elsewhere, is the distinguishing characteristic of this species.

P. GRACILLIMA, Weinkauff. Pl. 2, fig. 15.

Shell spirally ribbed, the second rib from the sutures crenulated, the third prominent; white, sparsely maculated with chestnut. L. 36, diam. 9 mill.

Habitat unknown.

Distinguished by its narrow, graceful form, and crenulation.

P. MARMORATA, Lamarck. Pl. 2, figs. 16, 16 *a*, 17.

Shell rather sharply carinate on the shoulder, encircled by narrow small, sharp ribs and intermediate raised lines; white, usually thickly maculated in a longitudinal manner with chestnut-brown, sometimes minutely punctate with chestnut.

L. 75, diam. 21 mill.

Red Sea, Malacca, Japan, Australia, Polynesia.

The usual appearance of this species is represented by fig. 16; occasionally it is spotted, and sometimes it is entirely devoid of coloring. *P. hastula*, Reeve (fig. 17), is the young of this species.

P. PEASEANA, Dunker. Pl. 2, fig. 18.

Shell carinate, with a pair of prominent ribs at the suture and other less prominent ribs and raised lines throughout; yellowish, flammulate with brown. L. 25, diam. 7 mill.

Indian Ocean.

A young shell, which may possibly prove to be identical with *P. Garnonsii*, Reeve.

P. UNEDO, Valenciennes. Pl. 3, fig. 20.

Shell angularly turreted, with concavely sloping shoulders defined by duplicate granular ribs, forming the angle; every-

Digitized by Google

where encircled by narrow elevated ribs and striæ which are often granular or coarsely decussated by rugose growth-lines; white, clouded and spotted with light chestnut.

L. 66, diam. 23 mill.

Indian Ocean, Japan.

P. UNDOSA, Lamarck. Pl. 3, fig. 21.

Spire long; convex; carinated, narrowly ribbed throughout, the ribs with intermediate raised lines; canal short; white, profusely maculated longitudinally with chestnut; aperture purple.

L. 64, diam. 20 mill.

Indian Ocean, Philippines.

The long spire, short canal, profuse maculations and purple aperture are the principal features.

P. GUERINII, Duval. Unidentified. *Habitat unknown.*

P. LATERCULATA, Sowerby. Unfigured. *China Seas.*

P. ALBULA, Hutton. Unfigured. *New Zealand.*

B. *With short canal.*

P. CINGULIFERA, Lamarck. Pl. 3, fig. 23.

Shell rather narrow, with very long spire, and short canal, corded with larger and smaller riblets and raised lines, and very slightly angulated on each whorl by a somewhat larger rib, which is occasionally bipartite; growth-striæ sharp, sometimes decussating the smaller spiral lines; whitish, very closely and finely peppered with chestnut, with chestnut spots on the shoulder-rib.

L. 53, diam. 16 mill.

Red Sea, Philippines, to *Sandwich Islands.*

P. amicta, E. A. Smith, from the Sandwich Islands, differs apparently only in the coloring; it is unfigured.

P. ERYTHRÆA, Jickeli. Pl. 3, fig. 24.

Revolving riblets more regular, flatter, and proportionally larger than in the preceding species, chestnut punctations larger and darker-colored, the line of spots on the second rib from the suture being particularly conspicuous; base of aperture violet-tinted. L. 22, diam. 8 mill.

Red Sea.

Notwithstanding the above distinctive characters, I think this will prove to be a synonym of *P. cingulifera.*

Digitized by Google

P. ABBREVIATA, Reeve. Pl. 3, fig. 25.

Shell rather stout, with a prominent shoulder-keel, composed of two approximate ribs, and less prominent revolving ribs and lines below it, articulated with dark chestnut; above the keel concave, with a strong rounded sutural rib, marked by large dark chestnut spots. L. 33, diam. 12–15 mill.

Red Sea, Mauritius, Philippines, Viti Islands.

P. USTULATA, Reeve. Pl. 3, fig. 26.

Shell short and stout, with channeled sutures and a carination composed of a pair of ribs, above and below which the surface is irregularly lirulate; pale burnt-brown, with transverse chestnut spots, and darker spots on the keel. L. 32, diam. 13 mill.

Mauritius.

P. PHILIPINERI, Tenison-Woods. Pl. 34, fig. 82.

Shell elongately fusiform, ovate, turreted, rather solid, shining, pale chestnut, at the suture dotted fulvous; spire conical, a little longer than the aperture: whorls nine, convex, sloping, angular above and canaliculate, granular at the angle and sutures; spirally lirate and very finely striate lengthwise; liræ broad, rounded; interstices furnished with two or three lirulæ; apex acute, nucleus smooth, rounded; aperture widely ovate, labrum acute, sinus broad and deep, lip reflected, white, throat polished, canal short, scarcely recurved. The granules at the angle wide and numerous. L. 34, diam. 15; long. apert. 15, lat. 8 mill.

Tasmania.

Figured from a specimen kindly sent by Mr. C. E. Beddome.

P. VIRGINEA, Valenciennes. Pl. 34, fig. 80.

Shell short, with obtuse canal and spire, with strong revolving ribs; whitish, maculated and spotted with chestnut.

Length, 19 mill. *Japan* (Schrenck).

Peculiar in its stumpy form: it is very different from *Clavatula virginea*, Beck.

Cingulatæ.

Shell usually brownish or horn-color, unspotted, with strong, sharp revolving ribs.

A. *With long canal.*

P. FAGINA, Ads. and Reeve. Pl. 3, fig. 22.

Shell dark chestnut-brown, with close, equal revolving ribs and narrower equal grooves, aperture purple. Length, 70 mill.

 China Sea.

Digitized by Google

P. CRYPTORRAPHE, Sowb. Pl. 3, figs. 30, 31.

Yellowish brown to chestnut-color, with two strong sharp keels, and smaller revolving lines, aperture frequently tinged with purple. L. 70, diam. 18 mill. *Philippines, Moluccas.*

It is the *Pl. bicarinatus* of Wood, and *P. Woodii* of Kiener (fig. 31). *P. elongata*, Gray, is possibly the same.

P. VIRGO, Lamarck. Pl. 3, fig. 32; Pl. 4, figs. 34, 35, 43.

Shell ridged and striated, the central ridge forming a carina; usually glossy white, but when covered by its epidermis corneous. L. 100, diam. 28 mill. *West Indies.*

The above measurement is from an unusually large specimen before me. *Pl. Antillarum*, Crosse (fig. 34), and *P. Jelskii*, Crosse (fig. 35), are younger examples of the same species, the slight variations shown by the figures being connected with the type form by the series of specimens before me. *P. Gruneri*, Phil. (fig. 43), may also be referred here.

P. INDICA, Deshayes. Pl. 6, figs. 82, 80.

Shell very like the preceding species, but less distinctly ridged, the shoulder-angle being very slight, and the other revolving ridges very much smaller and closer; yellowish brown, sometimes indistinctly marbled or variegated. L. 80, diam. 22 mill. *China.*

With this species I am compelled to unite *P. Deshayesii*, Doumet (fig. 80), as I cannot find any good distinctive characters; the carinations being merely a little less prominent in the latter.

Reeve identifies with *P. Deshayesii*, *P. elongata*, Gray, a shell described, but not figured, in the Voy. of the Blossom. I cannot agree to this, as the description indicates a shell similar to *P. cryptorraphe*, Sowb.

P. OXYTROPIS, Sowb. Pl. 4, figs. 38, 39, 37.

Shell horn-colored, with several sharp keels and numerous spiral raised lines, the upper keel the strongest, angulating the whorls, the surface concave above it. L. 45, diam. 16 mill. *Panama* (to *Gulf of California*), *Japan*, *China.*

P. nobilis, Hinds (fig. 39), and probably the unfigured *P. albicarinata*, Sowb., are synonyms. The keels are lighter-colored or nearly white on the top, because denuded of epidermis by

Digitized by Google

rubbing. *P. leucotropis*, Adams and Reeve (fig. 37), has no distinctive characters except its different distribution, and may also be united with this species. Sowerby reports it from Mauritius, and its occurrence in the China Sea is well-established; on the other hand the west coast of America localities of *P. oxytropis* need confirmation.

P. FASCIALIS, Lamarck. Pl. 4, fig. 40, 45.

Shell concavely shouldered, forming a somewhat babylonic spire, sharply ridged throughout, the two ridges forming the shoulder more prominent; yellowish to brownish, the ridges dark chestnut. L. 50, diam. 18 mill.

Philippines; Red Sea (Issel).

P. brevicaudata, Reeve (fig. 45), appears to me to be a juvenile of this species.

P. PÆTELIANA, Weinkauff. Pl. 13, fig. 58.

Whorls ten, slightly excavated above, girdled by prominent liræ; light violet brown, bilineated with white; aperture purple-brown. Length, 30 mill.

Habitat unknown.

P. LIRATA, Pease.

Shell fusiform, turreted, keeled all over, keels nearly of the same size, and almost equidistant, the keel on the middle of the whorls slightly the largest, the intermediate superfices concave, interstices between the keels finely striate longitudinally; sinus deep; canal short; white, keels spotted with reddish brown.

L. 35, diam. 12 mill. *Isl. Oahu.*

Is possibly identical with *P. Pæteliana*, but differs in having the keels spotted. I have not seen it, and no figure has been published. The specific name is preoccupied.

B. *With short canal.*

P. VIOLACEA, Hinds. Pl. 4, fig. 42; Pl. 3, figs. 29, 29 *a*.

Shell multicarinate, the interstices longitudinally striate; pale violaceous or whitish, sometimes indistinctly fasciated with a darker color above; columella one- or two-plaited; outer lip acute, crenulated, with a slight sinus. L. 24, diam. 7 mill.

Red Sea, Persian Gulf, Japan, Philippines, New Guinea, New Zealand, Australia.

Digitized by Google

C. B. Adams changed the name of this species to *Reevei* because he had previously described a shell under the name of *violacea*, but as the latter is a Bela, Hinds' name may stand. *P. vertebrata*, E. A. Smith (figs. 29, 29 *a*), is probably synonymous.

P. DECLIVIS, Martens. Pl. 4, fig. 41.

Shell multicarinate, the carinæ stronger and fewer than in the preceding species; canal somewhat more produced and narrowed; sinus shallow; columella not plicate; color light reddish fulvous.

L. 33, diam. 11 mill.

Japan.

P. FILOSA, Marrat.

Shell acuminately turreted; whorls convex, with numerous prominent revolving carinæ, the interstices narrow, obliquely longitudinally striated; white, the apex tinged with fuscous; canal very short; sinus ample. (No dimensions.)

W. Africa.

A white shell, corded with transverse, thread-like bands. The *Pl. violacea*, Hinds, *Pl. crispata*, Crist. et Jan., and several others are similarly corded and closely allied shells.

The above is an unfigured species, which I have not seen.

P. RETUSISPIRATA, E. A. Smith.

An unfigured species, L. 7·75, diam. 2·5 mill. Habitat unknown; it is said to have for its nearest relative "*P. violacea*, Hinds, from which it differs in form somewhat; the apex is blunter, and there is but a single nodose liration around the middle of each whorl, whereas Hinds' species possesses two." Columella with two minute plications.

P. COGNATA, E. A. Smith.

Unfigured. L. 24, diam. 7 mill. *Australia.* Differs from *P. violacea*, to which it is closely related in color (being luteous white, purple-tinged towards the apex, the carinæ white), in the number of carinæ, twelve, and more produced spire. "It is still more nearly allied to *P. vallata*, Gould, from which it differs only in size and the presence of only one plication on the columella, whereas *P. vallata* possesses two. It may be merely the adult of the latter species."

Digitized by Google

P. SPIRALIS, E. A. Smith. Pl. 4, fig. 44.

Shell fusiform, pallid brown, cingulated with carinæ, of which there are about twelve on the body-whorl, subequal, interstices obliquely striate; aperture narrow, collumella blackish brown; canal very short; outer lip thin, with a large sinus.

L. 11, diam. 3 mill.

Whydah, W. Africa.

"This species belongs to the same group as *P. violacea*, Hinds." Does it differ from the West African *P. filosa* of the same author?

P. VALLATA, Gould.

Shell small, lanceolate, lurid, with ten shouldered and carinate whorls, with elevated revolving lines—of which there are ten or twelve on the body-whorl; aperture one-third the total length of the shell, narrow; outer lip with a profound, wide sinus; columella smooth. L. 9, diam. 3 mill.

Near Hong Kong, 10 fathoms, shelly mud (Stimpson).

Unfigured. Said to be allied to *P. violacea*, and described as a Drillia.

P. RECIPROCA, Gould.

Shell small, lanceolate, with ten slightly convex whorls bearing revolving carinæ, of which there are 4–5 on the spire-whorls, and 10–12 on the body-whorl; middle carina stronger, interspaces clathrate; aperture one-fourth the total length, the sinus broad and deep; the canal short, wide and twisted.

L. 12, diam. 4 mill.

Ousima (Stimpson).

Much like the preceding; but the color and relative size of carinæ are different. Unfigured, and unseen by me.

P. JUBATA, Hinds. Pl. 4, fig. 46.

Whorls with several keels, of which the middle one is the largest, with a beaded row of granules immediately over it; yellowish brown. L. 25, diam. 11 mill.

Malacca, China, Australia.

P. acutigemmata, E. A. Smith, is an unfigured species, locality unknown. The describer says: "It is with considerable hesitation that I apply a name to this form, on account of its close

Digitized by Google

relationship with *jubata*, Hinds. The chief differences are the narrower form, larger tubercles and shorter canal." As *jubata* is known to vary considerably in the above characters, *acuti-gemmata* had better be considered a synonym.

P. EMENDATA, Monterosato. Pl. 4, fig. 47.

Shell brown, the spire-whorls with three cingulæ and two liræ, the last whorl spirally multicingulate and longitudinally lirulate; suture slightly but distinctly incised; aperture white within, canal short and wide, sinus wide, between the first and second carina. L. 9, diam. 3 mill.

Mediterranean Sea; Bay of Biscay, at great depths.

Mr. Jeffreys says this species inhabits the Japanese Seas; if so, some of the foregoing species will probably refer to it. Described and figured by Philippi as *P. Renieri*, Scacchi—an erroneous identification and name changed by Monterosato, as above.

P. NIPONICA, E. A. Smith. Pl. 3, fig. 27.

Shell light brown, whorls six and a-half, the nucleus large, globose, glassy, whorls strongly keeled, and concave above, with two or three fine spiral liræ; also concave below the carina, and encircled on the body-whorl by about ten liræ, becoming finer towards the base, the interstices crossed by elevated, oblique growth-striæ; slit in the concavity above the principal carination; columella a little prominent in the middle and oblique below; canal short, scarcely recurved.

L. 7, diam. 2·5 mill.

Japan.

The oblique incremental striæ are flexuous and turned to the right above the carina, and straight, inclined to the left below it.

P. TRIPORCATA, E. A. Smith. Pl. 3, fig. 28.

Shell pale brown or luteous, the nuclear whorl globular, glassy, the rest encircled by distinct keels, of which there are three on those of the spire, more numerous on the body-whorl; the interstices each latticed by three or four revolving lines and incremental striæ; notch deep and wide, above the principal keel.

L. 14, diam. 4·5 mill.

Japan.

Digitized by Google

P. DIFFICILIS, Smith. Pl. 32, fig. 16.

About ten rather coarse spiral liræ on the last whorl, the sinus above the submedian liration; brownish horn-color.

Length, 7 mill.

Japan.

Subgenus GEMMULA, Weinkauff.

P. SPECIOSA, Reeve. Pl. 4, fig. 48.

Shell crenulately carinate or ribbed, the principal carina, forming the angle of the whorls, corded, with a sloping shoulder above it; yellowish white, the ribs ochraceous.

L. 47, diam. 18 mill.

China.

P. CARINATA, Gray. Pl. 4, fig. 49.

Shell closely encircled by sharp ribs and intermediate striæ, the slit-band a pair of beaded ribs; suture channeled; yellowish white, chestnut-spotted on the ribs; fissure wide and deep.

L. 65, diam. 20 mill.

Habitat unknown.

P. Kieneri, Doumet, is a synonym.

P. GRÆFFEI, Weinkauff. Pl. 4, fig. 50.

Shell brownish, crenulately carinate or cingulate, the ribs lighter-colored, the median carina stronger, with larger crenulations; aperture plicate within. L. 20, diam. 6 mill.

Viti Islands.

Doubtfully distinct from the next species.

P. GEMMATA, Hinds. Pl. 4, figs. 51, 54.

Shell more slender than the preceding species, with a more prominent noduled keel, and spiral lirulæ; yellowish brown, the keel usually white, sometimes indistinctly brown-banded above and below it. L. 26, diam. 7·5 mill.

Red Sea, *Japan*, *Australia* (Brazier),
Viti Islands (Garrett).

Hinds' locality, Magdalena Bay, Lower California, has not been confirmed. *P. monilifera*, Pease (fig. 52), is perhaps somewhat stouter, with shorter spire and canal in the examples figured by Weinkauff, but from those before me I am convinced that it passes into the typical *gemmata*.

P. fusca, Hombron et Jacq. (fig. 53), although figured as of a

Digitized by Google

uniform dark chestnut-color, is nevertheless so close in form and sculpturing that I think it belongs here; the Japanese shells with light-colored keel referred to *fusca* by Mr. E. A. Smith are certainly identical with *P. gemmata*. *P. amabilis*, Jickeli (fig. 54), from the Red Sea has a sharper carina than the typical *gemmata*, and may possibly rank as a variety.

P. ARMILLATA, Reeve. Pl. 4, fig. 55.

Shell pyramidally ovate, somewhat fusiform, whorls keeled, the middle keel transversely beaded; sinus large and deep; yellowish white, brown-banded above the keel. L. 19, diam. 8 mill.

Philippines (Cuming), *Australia* (Brazier).

A stouter, shorter species than *P. gemmata*, with the tubercles transverse instead of longitudinal.

Unfigured and Unidentified Species of Pleurotoma.

(*The subgeneric group not ascertained.*)

P. GRACILLIMA, Carpenter. *Bay of Panama.*

Described from a single specimen, ·83 in. long, in the Cuming collection. Weinkauff has subsequently used the same specific name (p. 165).

P. CANDIDA, Jonas. H. and A. Adams' Genera, i, 88.

P. SANCTI-JOANNIS, E. A. Smith. *Japan.*

P. NELLIÆ, E. A. Smith. *Mauritius.*

P. CEYLONICA, E. A. Smith. *Ceylon.*

P. ALBOFASCIATA, E. A. Smith. *Sandwich Islands.*

P. MULTISERIATA, E. A. Smith. *Ceylon, Persian Gulf, China Sea.*

P. ANTIPODUM, E. A. Smith. *New Zealand.*

Genus GENOTIA, H. and A. Adams.

G. MITRÆFORMIS, Wood. Pl. 7, figs. 1, 2, 2 *a*.

Periphery noduled, above it the shoulder is sloping, slightly concave, with revolving lines, lightly marked; below the periphery decussated by close revolving and somewhat curved growth-lines; yellowish or orange-brown. L. 42, diam. 13 mill.

W. Africa.

Digitized by Google

Var. PAPALIS, Reeve. Figs. 2, 2 *a*.

Shoulder somewhat flatter, nodules more distinct, as are the longitudinal lines or folds, the revolving sculpture scarcely decussating them and sometimes obsolete; sometimes indistinctly banded. L. 47, diam. 16 mill.

W. Africa.

This is merely a more rugged larger growth of *G. Mitræformis*, and its best claim to a separate name is that it has borne one for forty years.

G. LUHDORFI, Lischke. Pl. 7, fig. 100.

Shell yellowish brown; shoulder concavely flattened, with a crenulated margin next the suture, and a tuberculate periphery; surface with spiral, white, distant sulci, and incremental striæ; aperture white. L. 71, diam. 26 mill.

Japan.

The white revolving sulci on the brownish surface are very distinctive in this species.

G. MITRELLA, Dall. *Yucatan Strait*, 640 fms.
G. DIDIMA, Watson. *St. Thomas, W. I.*, 450 fms.
G. ENGONIA, Watson. *Off Inosima, Japan.*
G. ATRACTOIDES, Watson. *Philippines.*

The above are all unfigured species, described as Genotiæ.

Genus COLUMBARIUM, von Martens.

Shell fusiform, with the short body-whorl, and long, straight, narrow, nearly closed canal of the typical Fusus; no sinus, except a very slight curve of the margin of the shoulder. Teeth toxoglossate.

I feel pretty well satisfied, notwithstanding Schacko's discovery of toxoglossate dentition in this group, that I was correct in placing the typical species in Fusus; nevertheless I introduce it again here, partly in order to dispose of a form described by von Martens and which was published since the issue of the third volume of the "Manual."

C. PAGODA, Lesson. Manual, vol. iii, p. 51, t. 32, f. 86. This volume, Pl. 7, figs. 98, 97, 99.

Fusus Japonicus, Gray, *Fusus diadema* (Lesson), Sowerby (Pl. 7, fig. 98), and *Pleurotoma cedo-nulli*, Reeve (fig. 97), are

Digitized by Google

synonyms. The latter is probably erroneously assigned to Panama, on Cuming's authority; it is evidently a young shell, and that Reeve should have placed it in Pleurotoma is suggestive.

Japan.

Var. SPINICINCTA, von Martens. Fig. 99.

Chestnut-brown, surface rougher, whorls 9, instead of 7–8, spines longer, more numerous, with oblique rows of short spines upon the canal. L. 67, diam. (without the spines) 14·5 mill.

W. Australia.

Genus ANCISTROSYRINX, Dall, 1881.

Shell with the posterior surface of the whorls concave, with a broad deep sinus, bordered externally by a pectinated elevated frill, directed backwards.

A. ELEGANS, Dall.

Shell with the canal about the same length as the spire, acutely tapering before and behind; white; whorls nine, of which two are embryonic; aperture very long and narrow; anterior surface of the whorls everywhere sculptured with even uniform spiral rows of rounded nodules beautifully reticulated by the lines of growth; one row about the middle of the whorl slightly elevated above the others; carina fringed with delicate triangular points; posterior surface of the whorls, except for lines of growth, smooth, with one row of nodules just inside the carina; canal straight, columella not thickened, but somewhat twisted anteriorly, outer lip sharply angulated by the carina.

L. 27 mill., of which 12 mill. are behind the carinal notch; max. width, 12 mill.; width of aperture, 4 mill. Defl. 45°.

Florida Reefs (Pourtales); *off Havana* (Agassiz).

Unfigured.

Genus DRILLIA, Gray.

Section BRACHYSTOMA, Swainson.

A. *Alatæ.*

D. STROMBOIDES, Sowerby. Pl. 10, fig. 58.

Shell with a sutural band, and oblique longitudinal ribs below the periphery, sculptured by revolving lines, which are somewhat granular towards the base of the body-whorl; aperture

Digitized by Google

somewhat winged; light yellowish brown, sometimes with a pale band. L. 26, diam. 9·5 mill.

Bay of Panama; five fathoms mud (Cuming).

D. CASTANEA, Reeve. Pl. 12, fig. 18; Pl. 34, fig. 87.

Chestnut-brown; longitudinally plicate, crossed by revolving lines; outer lip somewhat winged. L. 17, diam. 8 mill.

Moluccas (Weinkauff).

Reeve's figure (fig. 18) is of a specimen not adult; I add one from Weinkauff (fig. 87), which scarcely looks like the same species.

D. BICANALIFERA, Sowb. Pl. 12, fig. 27.

Shell with whorls concave and smooth above the periphery, which is angulated, longitudinally ribbed below, ribs small, granular, crossed by revolving striæ; lip somewhat winged, with a broad, rounded posterior sinus and a small anterior one; light yellowish brown. Length, 20 mill.

Bay of Montija, W. Coast of Central America (Cuming).

D. FLAVIDULA, Lam. Pl. 10, figs. 56, 57.

Rather thin, turreted, longitudinally obliquely ribbed, crossed by revolving lines; yellowish white to brown, the lighter-colored specimens sometimes indistinctly broadly fasciated with brown. L. 65, diam. 20 mill.

Red Sea, China, Japan.

D. zonata, Gray (fig. 57), is a synonym.

D. JEFFREYSII, E. A. Smith.

Subturreted; whorls thirteen, concave above, convex below, with oblique ribs and revolving lines; luteous, with maculations and dots of purplish brown. L. 37, diam. 11 mill.

Japan.

Allied to *D. flavidula*, but has a shorter aperture, broader canal, and distinct spiral striation upon the concave upper portion of the whorls. Unfigured.

D. LATISINUATA, E. A. Smith.

Shell fusiform and turreted; whorls twelve, excavated above, carinated and angulated in the middle, below the angle obliquely plicated; yellowish brown, with white revolving liræ; canal moderately long, slightly curved. L. 50, diam. 35 mill. *China.*

Digitized by Google

Allied to *D. flavidula*, Lam. Upper half of each whorl nearly smooth, as the plications extend scarcely beyond the central large spiral liration which marks the angulation of the whorls. Sometimes, this lira being double, the whorls are less acutely angular. Unfigured.

D. STOLIDA, Hinds. Pl. 10, fig. 61.

Fusiform, smooth, olive- or horn-brown; whorls depressed above the periphery, below it with short, whitish tubercular ribs; lip sharp, with broad sinus. L. 41, diam. 15 mill.

Agulhas Bank, Cape of Good Hope.

D. CRENULARIS, Lamarck. Pl. 10, figs. 64, 63, 66, 69; Pl. 32, fig. 38.

Abbreviately fusiform, upper portion of whorls slightly concave, periphery with the terminations of somewhat distant rounded ribs, separated by about equal interspaces, marked below the periphery by revolving lines, and intermediate fine striæ; canal very short; yellowish brown, with sometimes an obscure chestnut superior band, occasionally maculated with chestnut. L. 40, diam. 14 mill.

Tranquebar, Bombay, Singapore, Australia.

Reeve's figure (fig. 64) is not very characteristic, being taken from a very narrow, worn specimen; his *D. Tayloriana* (fig. 69) is a better representative of this narrow form. The typical *crenularis* is well represented by Weinkauff (fig. 38), and with it may be united *D. Sumatrensis*, Petit (fig. 63), and *D. Griffithii*, Gray (fig. 66).

The species of this group are not readily distinguishable; the last-named form, for example, connecting closely with *D. Stromboides*, Sowb.

D. MAJOR, Gray. Pl. 9, fig. 52.

Somewhat fusiform, dark brown, transversely marked with white lines; whorls nodulated in the middle, nodules white; aperture oblong, canal a little recurved. L. 43, diam. 19 mill.

Habitat unknown.

The figure indicates a species very distinct in form and coloring, yet Reeve says of it: "Very closely allied to the *Pl. Griffithii;* indeed some authors would account it to be a variety of that species." Weinkauff makes it a synonym of *D. flavidula*.

Digitized by Google

D. GIBBOSA, Born. Pl. 9, fig. 54.

Yellowish white or brownish, usually interruptedly broad-banded above and below the middle of the last whorl; spire turreted, the whorls with a sutural cord, and smooth, slightly concave shoulder, the periphery nodulous with the terminations of oblique, longitudinal ribs, which are crossed by strong revolving lines; labium with a very strong projecting superior callus; outer lip winged, with a second small sinus indicated towards the base. L. 60, diam. 20 mill. *West Indies.*

Allied to *D. flavidula*, but heavier, with shorter canal, and usually differently colored in having the pair of more or less interrupted, and mostly faint-colored bands.

D. ALABASTER, Reeve. Pl. 11, fig. 78.

Shell turreted, snowy white, sometimes faintly rose-tinged; longitudinally ribbed, with very fine revolving grooves and striæ; somewhat depressed next the suture; sinus broad.

Length, 30 mill.

Philippines (Cuming); *Darnley I., Australia* (Brazier).

The sculpture is exceedingly delicate, the cross-grooves looking as if they had been graved with an etching point.

D. UMBILICATA, Gray. Pl. 11, figs. 82, 91; Pl. 8, fig. 24; Pl. 30, fig. 78.

Shell light yellowish brown or yellowish white; with prominent, distant ribs, forming a strongly tuberculate shoulder, and revolving striæ; sinus produced upwards; inner lip thickened below, forming with the axis a false umbilicus.

Length, 1·2 inches.

Sierra Leone (Gray); *West Indies* (Swift).

D. Dunkeri, Weinkauff (Pl. 8, fig. 24), is an immature example of this species. *D. Saulcydiana*, Recluz (fig. 91), varies a little in sometimes possessing a broad indistinct central band of light chestnut; the shells are adult, although not so large as the type. Of its identity with *D. umbilicata* there can be no question.

D. ROSACEA, Reeve. Pl. 13, fig. 51.

Longitudinally closely ribbed, with fine revolving striæ, concave and smooth above the periphery; canal very short, sinus broad and large; rose-colored throughout. Length, 20 mill.

W. Coast of Africa (Maltzan).

Digitized by Google

D. CAGAYANENSIS, Reeve. Pl. 11, fig. 79.

Spire acuminated, whorls strongly angulated at the periphery, ribbed below, the ribs crossed by revolving striæ, forming low tubercles; sinus wide, ascending; white. Length, 18 mill.

Philippines (Cuming).

Is very probably identical with *D. alabaster*, Reeve.

D. VARIABILIS, E. A. Smith. Pl. 11, figs. 81, 92.

Yellowish brown, sometimes irregularly maculated with chestnut, with chestnut spots on a narrow band below the suture; spire long, turreted; slightly umbilicated; sinus large, ascending. Length, 1·25 inches. *Andaman Islands.*

The spire is longer and the color different from *D. alabaster*, Reeve, but it is very likely a variety of that species.

D. ROBUSTA, Hinds. Pl. 11, fig. 10.

Whorls strongly turreted, the spire exserted, periphery angulated and nodulous, with fine revolving striæ; sinus large, produced; yellowish white. Length, 75 inch.

Hong Kong, China, sandy mud, 4–7 fms. (Hinds).

D. SINUOSA, Gray. Pl. 13, fig. 45.

Shell solid, turreted, with a few prominent longitudinal ribs terminating at the periphery, crossed by close, strong striæ; aperture broadly cut out below, with no proper canal; sinus large, ascending. White, or brownish with white ribs, or whitish indistinctly maculated or centrally banded with light brown.

Length, ·75 inch. *Habitat unknown.*

D. UNIMACULATA, Sowb. Pl. 10, fig. 59.

Shell less solid than *D. gibbosa*, without sutural band or spiral striæ, the knobs on the periphery rather short, instead of terminating ribs as in *D. gibbosa;* yellowish brown, spotted with chestnut, one large spot on the back of the body-whorl.

L. 38, diam. 13 mill. *Panama.*

Very doubtfully admitted as a distinct species from *D. gibbosa.*

D. SOWERBYI, Reeve. Pl. 10, fig. 67.

Turreted, with a nodulous sutural band and nodulous periphery, the latter terminating longitudinal oblique ribs, which are sharply decussated by revolving sculpture; chestnut-brown.

L. 44, diam. 14 mill. *China?*

Digitized by Google

This is possibly only a dark-colored, strongly sculptured *D. gibbosa*. It is *P. turricula*, Sowb., not Montagu, and *P. corrugata*, Sowb., not Kiener.

D. MAURA, Sowerby. Pl. 10, fig. 70; Pl. 32, fig 43.

Shell dark chocolate-color, with oblique longitudinal ribs; nodulous at the crossing of raised revolving lines.

L. 48, diam. 13 mill.

West Columbia (Cuming).

D duplicata, Weinkauff (not Sowerby) (Pl. 32, fig. 43), is a synonym.

D. MILITARIS, Hinds. Pl. 10, fig. 74.

Acuminately turreted, yellowish white, sometimes stained with brown; whorls decussated with nodulous longitudinal ridges, and spiral striæ; upper part of the whorls concave, edged with a slightly nodulous keel. L. 43, diam. 12 mill.

Veragua, W. Coast of America.

I am not acquainted with this species, but think it probable that it is only a light-colored variety of the preceding one.

D. LANCEOLATA, Reeve. Pl. 10, fig. 65; Pl. 32, fig. 44.

Shell orange-brown, the tubercles lighter-colored; spiral striæ stronger towards the base of the body-whorl.

Length, 53 mill.

Japan.

Reeve's figure being from a poor and broken specimen, I add a much finer one from von Martens (fig. 44). It may be distinguished from its allies mainly by the narrower form.

D. INTERRUPTA, Lamarck. Pl. 10, figs. 68, 76.

Sharply turreted, longitudinally ribbed and spirally striated; yellowish brown, the ribs reddish brown. Length, 30 mill.

Japan.

D. seminifera, Gould (fig. 76), is a synonym.

D. DALLI, Verrill and Smith. Pl. 13, fig. 61.

Color brown of various tints, often deep brown, with one or two spiral bands of yellowish brown, and with streaks of light brown, or the ribs may be pale yellowish brown, aperture brown within, columella whitish in front; notch deep a little below the

Digitized by Google

suture, usually constricted or almost closed at the edge of the lip, but broadly rounded at the extremity. Length, 19·5 mill.

Martha's Vineyard, 94 to 146 fms.;
off Delaware Bay, 104 fms.

Animal and operculum not observed; the generic position is therefore very uncertain. It is described simply as a Pleurotoma.

Unfigured Species.

D. PYRRHA, Watson. (Related to *lanceolata*, but more stumpy.) *Japan.*

D. STERRHA, Watson. *N. Australia.*

B. *Pusionellæformes.*

These shells are very like Pusionella in form, but differ in the surface and in possessing the normal operculum of Pleurotoma; they differ also from the typical Drilliæ in wanting the callus deposit on the upper portion of the labium. Any one who is fond of minute divisions of the genera has here a chance to distinguish himself by instituting a new subgenus.

D. INERMIS, Hinds. Pl. 12, figs. 43, 40; Pl. 32, fig. 42.

Pinkish ash-colored under a light olivaceous epidermis, the lines of growth, which are sometimes rib-like, oblique and angulated at the periphery and lighter-colored, so that the interspaces appear like angulated lines of chestnut or reddish narrow stripes; whole surface covered by close revolving incised lines.

L. 38, diam. 13 mill.

Southern California, L. California.

D. penicillata, Carpenter (fig. 40), described from beach-worn specimens, having the same general form as the above, as well as its peculiar coloring, was supposed to differ principally in having stronger and fewer plications. I can find no good characters by which to distinguish it. The shell which Weinkauff figures for *D. inermis* is not that species.

D. INCISA, Carpenter. Pl. 12, fig. 41.

Shell in general form like the preceding species, but smaller, the whorls somewhat more rounded; cinereous, with reddish chestnut revolving lines. L. 1·13, diam. ·4 in. *Puget's Sound.*

Digitized by Google

D. CANCELLATA, Carpenter.

Shell like a young *incisa* in form, the spire decorticated, four planate whorls remaining, suture distinct, with about twenty small longitudinal ribs crossed by close revolving striæ, cancellating the surface, and sometimes the intersections subnodulous.

Puget's Sound.

Two specimens found. I an not acquainted with the species; it has not been figured.

D. EBURNEA, Carpenter.

Shell turreted, pinkish white, rather thin, smooth, shining; spire decollated; nine normal whorls remaining, planate above, appressed above the sutures and medianly concave, with here and there obsolete irregular longitudinal ribs, base prolonged, with a conspicuous, open canal. L. 1·3, diam. ·45 mill.

Near Gulf of California.

Easily recognized by its smooth, glossy aspect and French-white color; the notch lying along a broad spiral channel, which throws the junction of the whorl as it were up the suture. Unfigured and unknown to me.

D. MŒSTA, Carpenter. Pl. 12, fig. 38.

Shell dark brown under an olivaceous epidermis, with about ten curved longitudinal ribs, obsoletely nodulous on the periphery, with the whorls usually slightly constricted above it, ribs generally obsolete on the body-whorl of adult specimens; suture narrowly corded, noduled and spotted; aperture chocolate within. L. 30, diam. 10 mill.

Southern California, Lower California.

D. TOROSA, Carpenter. Pl. 14, fig. 93.

Whorls with angulated shoulder bearing nodulous terminations of about ten short oblique ribs, no spiral sculpture; burnt-brown, under an olivaceous epidermis; nodules whitish, aperture brown. L. ·95, diam. ·3 inch.

Southern California.

Var. AURANTIA, Carpenter.

Shell orange-colored, sometimes spirally striate.

L. ·6, diam. ·28 inch.

Digitized by Google

D. EROSA, Schrenck. Pl. 12, fig. 39.

Shell longitudinally ribbed and spirally striated, a narrow band at the suture; brown, with sometimes a darker band at the suture and another at the base. L. 17, diam. 6 mill.

Gulf of Tartary, Japan.

D. IMPAGES, Adams and Reeve. Pl. 10, fig. 73.

Shell flexuously, narrowly ribbed or plicate, the plicæ extending to the suture, but not prominent; yellowish brown.

Length, 36 mill.

China Sea.

This species has not been recognized by any conchologist subsequent to its publication in the Voyage of the Samarang; it is more like Clionella than any other of the group.

D. NOVÆ-ZELANDIÆ, Reeve. Pl. 12, figs. 44, 42.

Shell spirally sulcate and longitudinally striate, the suture slightly impressed, marginate and subcrenulate; sinus rather broad and shallow; rose-ash color, purple-rose within the aperture. Length, 1 inch.

New Zealand.

First described by Quoy under the name of *rosea* (fig. 42)—preoccupied by Sowerby, changed by Deshayes to *Quoyi*, preoccupied by Desmoulins.

D. DIGNA, E. A. Smith.

Shell ovately fusiform, bluish ash under a thin light olivaceous epidermis; whorls nine, slightly convex, with 13–14 oblique longitudinal ribs, forming nodules on the periphery; aperture brown, bifasciate with white, the lip thin, white-margined, with a small sinus; columella callous towards the base; canal rather short and wide. L. 26, diam. 9 mill.

California.

I am not acquainted with this species; it is unfigured.

D. MONTEREYENSIS, Stearns. Pl. 12, fig. 30.

Shell similar in form to *D. torosa*, but smaller, the longitudinal nodules and short ribs number 14 to 15 on each whorl, with rather coarse inconspicuous revolving striæ, there are also indistinct puckerings at the suture of the spire-whorls; dark

Digitized by Google

brown, the ribs rubbed white; canal short, sinus of outer lip moderate, rather broadly rounded. L. 17, diam. 6 mill.

Monterey, Cal.

Described from a single specimen. I have not seen it, but judging by the description and figure, it differs from *D. torosa* principally in the greater number of ribs.

D. HEMPHILLI, Stearns. Pl. 13, fig. 49.

Shell small, slender, polished, with a long spire and short aperture terminating in a short, broad, open canal; horn-colored; there are inconspicuous longitudinal ribs on the spire, which are obsolete on the body-whorl, and an impressed sutural line.

L. 6·5, diam. 2·3 inches.

Todos Santos Bay, L. California.

Section CLAVUS, Montfort.

Distinguished by the short, turreted form, broad base, appearing truncated below, tuberculated periphery and want of spiral sculpture.

D. ECHINATA, Lam. Pl. 9, fig. 31.

Shell whitish, with chestnut longitudinal streaks, forming bands interrupted by the ribs, often chestnut-spotted between the tubercles. Length, 2 inches. *W. Coast of Africa.*

D. AURICULIFERA, Lam. Pl. 8, fig. 25.

Shell white, with a broad chestnut band below the periphery; tuberculations of the periphery often long, spinose; usually a revolving row of nodules below the middle of the body-whorl.

Length, 1 inch. *Philippines.*

According to Deshayes this is the *Strombus lividus*, Linn., but the identification remains doubtful.

D. EXASPERATA, Reeve. Pl. 8, fig. 26.

Shell resembling *D. auriculifera* in general form and coloring, but the tuberculations on the periphery are short and more numerous; the shell is also usually heavier. Length, 21 mill.

Mauritius (Robillard).

D. UNIZONALIS, Lamarck. Pl. 9, figs. 38, 33, 34, 30; Pl. 32, fig. 48.

Shell nodosely plicate, smooth, or with a few close revolving lines at the base; whitish or yellowish white, the body-whorl

Digitized by Google

below the periphery chocolate, sometimes with a white band at the base; interior chocolate, with an irregular white superior band. Length, 22 mill.

Viti Islands, Philippines.

The synonyms are *D. vidualoides*, Garrett (fig. 33), including the larger specimens, usually completely chocolate below the periphery; *D. vidua*, Reeve (= *nigrozonata*, Weink., fig. 34), in which there is an inferior row of very small tubercles, more or less apparent. *D. vidua*, Hinds (fig. 30), which Dr. Weinkauff considers a distinct species and refers to the Voy. Sulphur, 60, t. 6, f. 6, for description and figure, is not to be found in that work, and does not differ from the *vidua* of Reeve. I am inclined to think *P. Beckii* of Weinkauff (Pl. 32, fig. 48) belongs here, whatever may be said of the very obscure species figured by Reeve under that name.

D. BECKII, Reeve. Pl. 9, fig. 40.

Shell oblong, cylindrically attenuated, sharp at the apex; six-angled, whorls longitudinally tuberculated at the angles; the entire shell olive-brown except the tubercles, which are white; columella and interior of the mouth brown; canal very short. Length, 22 mill.

I. Luzon, Philippines.

If Reeve's figure of this shell is correct, Dr. Weinkauff's identification of it (see *D. unizonalis*, above) must be erroneous.

D. PULCHELLA, Reeve. Pl. 9, figs. 28, 29.

Pink, with a chestnut band below the periphery, and a chestnut line, interrupted by the tubercles. Length, 21 mill.

Mauritius, Philippines, Cook's Islands.

I think *D. bilineata*, Reeve (fig. 29), is identical; it appears to differ only in the tuberculations being less sharp and the color not so bright, with a brownish tinge. No locality is given for *D. pulchella* in the original description.

D. LÆTA, Hinds. Pl. 9, fig. 32; Pl. 11, fig. 87.

Shell smooth, polished; whorls with a strongly tuberculated shoulder, the body-whorl with a second inferior row of small, sometimes obsolete tubercles; white, banded with brown, the band often more or less interrupted. Length, 9–17 mill.

Sts. of Macassar, New Guinea, Viti Islands.

Digitized by Google

D. formosa, Reeve (Pl. 11, fig. 87, double natural size), appears to be identical; it comes from the Philippine Islands.

D. HEXAGONA, Sowb. Pl. 9, fig. 35.

Shell sharply pyramidal, reddish brown, whorls hexagonal, very finely striated, ribbed-tuberculated, the ribs six on each whorl; sinus broad. Length, 23 mill.

Guacomayo, Central America (Cuming).

Dr. Weinkauff's figure of this species is not at all characteristic, and resembles *D. Beckii*, Reeve.

D. POLYGONALIS, Weinkauff. Pl. 9, fig. 45.

Whorls nine, contracted above, convex on the middle, with longitudinal, curved nodulose ribs; white, with a chestnut band; canal very short, broadly emarginate at the base.

Length, 14 mill. *Zanzibar.*

Said to resemble closely *D. unizonalis*, but to be much smaller and more slender, with more numerous whorls.

D. ANGASI, Crosse. Pl. 9, figs. 37, 36.

Shell brownish olivaceous, whorls about nine, the embryonal whorls smooth, the others with from seven to ten short longitudinal costæ forming a tuberculated shoulder, surface often with minute revolving striæ; aperture chestnut-brown.

Length, 11–13 mill.

Port Jackson, Australia; Tasmania.

Having received this species from several collectors and conchologists I find considerable variation in the number of ribs and in the proportions of the shell, some having a longer spire and narrower form even than the figure of *D. Angasi*, whilst others are short and stout, as in the form called by Crosse *D. Beraudiana* (fig. 36); sometimes there is a brown band below the middle of the body-whorl.

D. MEDIOCRIS, Deshayes. Pl. 9, fig. 41.

Whorls eleven, nodosely plicate in the middle, the body-whorl with revolving striæ towards the base; flesh-brown, with a central interrupted narrow chestnut band, base broadly chestnut-banded. Length, 11 mill.

Isl. of Bourbon.

Described from a single specimen—which I have not seen.

Digitized by Google

D. EXIGUA, Hombr. et Jacq. Pl. 9, fig. 39.

Shell not adult, composed of seven whorls, brownish, with distant, large white tubercles on the periphery. Length, 10 mill.

Torres Sts., Australia.

Described from a single specimen. It may be a young shell of the stumpy form of *D. Angasi*, Crosse.

D. VITTATA, Reeve. Pl. 9, fig. 44.

Whorls slightly concave above the periphery, which is tuberculate, with two or three inferior rows of smaller tubercles; yellowish white, with a chestnut band occupying the shoulder of the whorls. Length, 15 mill.

Philippines (E. A. Smith).

Mr. Smith changed the name to *P. exquisita*, on account of *Mangilia vittata*, Hinds; but as Mangilia is generally regarded as a distinct genus from Drillia, there is no occasion for this.

D. COCCINATA, Reeve. Pl. 13, fig. 54; Pl. 30, fig. 85.

Whorls smooth or obsoletely striate, concave around the upper part, plicately nodose on the periphery; pink-white, stained with rose-color between the nodules, and sometimes below them, occasionally faintly banded with rose on the lower part of the body-whorl. Length, 12–15 mill.

West Indies.

Occasionally the color varies to a pinkish brown, and I have before me a pure white variety from Yucatan. *D. pulchella*, Reeve (p. 186), is very closely allied. *D. lævisulcata*, Maltzan (Pl. 30, fig. 85), from West Africa, agrees with this species except in its color, which is bluish gray. As only dead shells were found in mud, they were possibly discolored. *D. rosolina*, Marrat (unfigured), described below, also needs to be compared with *coccinata*.

D. EBUR, Reeve. Pl. 13, fig. 56.

Shell white, strongly nodulosely plicate, obsoletely spirally striate; pure white. Length, 17 mill.

West Indies.

Described by Reeve from specimens in the Cumingian collection, without locality. Some of these are before me, and on comparison with shells from St. Thomas and St. Croix, W. I., show no differential characters. The nearest species is *D.*

Digitized by Google

coccinata, but that shell is more numerously ribbed and more slender.

D. THEA, Dall. Pl. 34, fig. 1.

Whorls eight, ashy olivaceous, covered with a shiny very thin epidermis, claret-brown within the aperture; with eleven short, oblique, slightly curved ribs, more prominent on the periphery and fading away above it; with evanescent spiral striæ, not always visible, and some stronger raised threads towards the base. Length, 15 mill.

Sarasota Bay, W. Coast of Florida, on mud-flats between tides (Hemphill).

D. IMPRESSA, Hinds. Pl. 13, fig. 53, magnified.

Tuberculately ribbed, ribs oblique, interstices transversely striated, back of the last whorl smooth; pale flesh-color, ribs whitish; outer lip a little expanded. Length, 9 mill.

W. Coast Central America.

A species having no very distinctive characters.

D. PUDICA, Hinds. Pl. 13, fig. 55.

Whorls shortly obliquely ribbed, the ribs obsolete on the back of the last whorl, depressed below the sutures; yellowish brown, with a deep reddish chestnut spot on the back of the body-whorl; canal rather long. Length, 13 mill.

West Coast of Central America (Hinds).

D. FUCATA, Reeve. Pl. 11, figs. 86, 93.

Shell obsoletely channeled above the periphery—which is not prominently angulated; longitudinal ribs numerous, rounded, not prominent, not interrupted on the periphery but continuous to the suture; sometimes obsoletely spirally striated; back of body-whorl with a peculiar hump or longitudinal varix; yellowish white, banded and maculated with yellowish or orange-brown. Length, 21 mill. *West Indies.*

D. paria, Reeve (fig. 93), is a synonym; the characteristic broad faint yellowish band is mentioned in the description, although not well indicated in the figure.

D. REGULARIS, Reeve. Pl. 13, fig. 52 (fig. 1½ nat. size).

Shell somewhat pyramidally ovate; whorls concave round the

Digitized by Google

upper part, obliquely regularly ribbed; sinus broad; yellowish white. Length, 12 mill.

Habitat unknown.

D. ROSEA, Sowb. Pl. 10, fig. 62.

Strongly plicately noduled, concave around the upper part of the whorls; outer lip somewhat wing-like, with a deep posterior sinus and a slight anterior one; pinkish brown, aperture rosy.

Length, 26 mill.

W. Coast of Central America.

D. ROSOLINA, Marrat.

Resembles *D. rosea*, but is obliquely ribbed, closely striated, and uniform rose-color. *W. Africa.*

Unfigured. No dimensions given.

D. ACUMINATA, Mighels. Pl. 12, fig. 20; Pl. 32, fig. 41.

Shell with a very slight angle on the periphery, with numerous small ribs reaching the suture and terminating at a raised revolving line on the lower part of the body-whorl; below this line are sometimes revolving striæ; livid or chocolate-brown, with a white band at the suture, ribs white, aperture brown.

Length, 10 mill.

Sandwich Islands; Indian Ocean (Nevill).

D. MARIEI, Crosse. Pl. 13, fig. 73.

Shell olivaceous brown, smooth, with a pair of narrow brown revolving lines below the periphery, body-whorl with one or two additional colored lines, situated inferiorly, the base with a few revolving striæ. Length, 10 mill. *New Caledonia.*

D. CLAVATA, Sowb. Pl. 11, fig. 95.

Shell with a few strong longitudinal ribs, which surmount the angulated periphery and reach the sutures; no revolving sculpture; outer lip thickened, the sinus large and ascending, aperture truncate below; whitish, the ribs slightly stained with flesh-color

Length, 13 mill.

Xipixapi, W. Columbia (Cuming).

D. PICA, Reeve. Pl. 13, fig. 50.

Shell thick; whitish, irregularly variegated with a few large squarish brown spots; upper portion of whorls smooth, concave, below the periphery with numerous narrow ribs; sinus broad.

Philippines (Cuming); *Mauritius* (Robillard).

Digitized by Google

The following unfigured species are referred by the describers to this section of Drillia; they are all unknown to me, except through the preliminary descriptions.

D. MARMARINA, Watson. *Off Pernambuco.*

Obtained by the Challenger Expedition. Said to be allied to *D. sacra*, Reeve—which does not belong to this section of the genus.

D. ALBOANGULATA, E. A. Smith. *Habitat unknown.*

D. SPINOSA, E. A. Smith. (Allied to *D. læta*, Hinds.) *Habitat unknown.*

D. INTERPUNCTA, E. A. Smith. *St. Thomas, W. I.*

The description applies pretty well to some individuals of *D. coccinata*, Reeve.

D. AMANDA, E. A. Smith. *Habitat unknown.*

D. DIVERSA, E. A. Smith. *Habitat unknown.*

D. QUADRILIRATA, E. A. Smith. *Habitat unknown.*

D. INTERSTRIGATA, E. A. Smith. *St. Thomas* and *St. Vincent, W.I.*

D. HOTTENTOTA, E. A. Smith. *Port Elizabeth, So. Africa.*

D. CAFFRA, E. A. Smith. *South Africa.*

D. COFFEA, E. A. Smith. *Philippine Islands.*

D. BELLULA, E. A. Smith. *St. Vincent, W. I.*

Section CRASSISPIRA, Swainson.

D. RUDIS, Sowerby. Pl. 14, figs. 85, 90.

Shoulder of the whorls prominently tuberculated, with smaller tubercles below it where the flexuous longitudinal ribs are crossed by coarse revolving lines; above the shoulder the whorls are contracted, and tuberculated at the sutures; chocolate-brown, usually broadly white-banded above the periphery, or the tubercles only white, with sometimes a narrow white band near the base.

Length, 25–35 mill.

Galapagos Islands (Sowb.); *Panama* to *Mazatlan.*

D. excentrica, Sowb. (fig. 90), is founded on an abnormal specimen, the last whorls somewhat displaced.

D. DIGITALIS, Reeve. Pl. 13, fig. 75.

Shell dark chocolate, covered by rows of lighter-colored granulations, caused by the decussation of small flexuous rather numerous longitudinal ribs and elevated revolving lines; aperture light chocolate. Length, 20 mill. *Philippines, Mauritius.*

Digitized by Google

D. BARKLIENSIS, H. Adams. Pl. 13, figs. 70, 71, 77.

Whorls granulated minutely, with a tuberculated shoulder; chocolate- or orange-brown, the latter often white-banded above the shoulder, and sometimes with an inferior narrow darker band; tubercles, and usually the granules, white.

Length, 1 inch.

Mauritius; New Caledonia (Souverbie).

D. strigata, Sowb. (fig. 71), is a synonym; as is also *D. Rougeyroni*, Souverb. (fig. 77), from New Caledonia.

D. BOTTÆ, Valenciennes. Pl. 13, fig. 74.

Shell ponderous, dark chestnut or chocolate, with a slight shoulder-angle, above which the whorls are slightly concave to a sutural band; below the shoulder with close rude longitudinal ribs, sometimes decussated into nodules by the raised revolving lines; towards the base of the body-whorl the latter remain prominent, whilst the former have vanished.

Length, 1·75–2·25 inches.

Panama to *Mazatlan*.

This species is usually known as *D. incrassata*, Sowb., a name which has priority over *D. Bottæ*, but was unfortunately previously used by Defrance.

D. CALLOSA, Valenciennes. Pl. 13, figs. 63, 68; Pl. 30, fig. 79.

Shell very solid, with a well-defined shoulder, and sulcate space above it; longitudinal ribs low, rounded, closer than in the preceding species, the interspaces being very narrow, crossed by raised revolving lines; chocolate-colored.

Length (decollated), 1·75 inches.

West Coast of Africa.

Very closely allied to *D. Bottæ*. I think *D. carbonaria*, Reeve (Pl. 13, fig. 68), is identical, and very likely the next species also.

D. CONSOCIATA, E. A. Smith. Pl. 30, fig. 81.

Whorls doubly carinated at the suture, below which the surface is concave to the periphery; longitudinal ribs six, strong, crossed by raised revolving lines; yellowish brown. Length, 24 mill.

W. Coast of Africa.

The color is lighter and the ribs less numerous than in *D. callosa*, yet it is probably only a variation of that species.

Digitized by Google

D. APPELII, Weinkauff. Pl. 10, fig. 75.

Shell narrower than *D. callosa*, with more numerous ribs and a longer canal; light ochraceous, indistinctly white-banded.

Length, 40 mill.

Habitat unknown.

D. FUSCESCENS, Gray. Pl. 14, figs. 97, 98; Pl. 15, fig. 13.

Shell deep chocolate-brown, the longitudinal ribs separated by wider interspaces, crossed by revolving raised lines, forming granules, above the periphery smooth and slightly concave, with a raised line next the suture. Length, 19 mill.

West Indies.

D. solida, Adams, *D. cuprea*, Reeve (fig. 98), and *D. nigrescens*, Gray (Pl. 15, fig. 13), are synonyms—the latter described from a small specimen. *D. nigrescens*, Adams = *nigrescens*, Gray, and has priority of publication over that species, as well as *fuscescens:* I think it better not to disturb the well-known name of the species, as Adams' description was not accompanied by a figure, and could not be positively identified until Adams himself subsequently pointed out that it was the same shell as that figured by Reeve as *nigrescens*, Gray.

D. HARPULARIA, Desmoulins. Pl. 14, fig. 99.

Chestnut- or chocolate-color, spire more slenderly elongated; canal longer and more compressed than the preceding species; the revolving lines do not form granules on the ribs.

Length, 1 inch.

Australia.

Barely distinguishable from the preceding species with the aid of the different locality.

D. SCHILINGI, Weinkauff. Pl. 12, fig. 28.

Strongly ribbed below the periphery, smooth and concave above it, ribs crossed by spiral striæ; yellowish brown, with chestnut bands; canal short and wide, subtruncate.

Length, 18 mill.

Zanzibar.

D. BÆTICA, Reeve. Pl. 12, fig. 26.

Dark shining chocolate-colored; ribs prominently pointed at the periphery; sinus broad and large. Length, 18 mill.

Habitat unknown.

Digitized by Google

D. FLAVESCENS, Reeve. Pl. 14, fig. 96; Pl. 21, fig. 22.

Yellowish olive; sculpture like *D. fuscescens*, except that there is no revolving line below the sutures. Length, 17 mill.

West Indies.

The lighter color and want of sutural line are not very good distinguishing characters, and it is probable that this species should be united with *D. fuscescens*. *D. affinis*, Gray (Pl. 21, fig. 22), appears to be a synonym.

D. HONDURASENSIS, Reeve. Pl. 14, fig. 95.

Whorls nodosely ribbed, with revolving striæ, and a smooth space below the sutures; alternately banded with yellow and ash-color. Length, 8 mill.

Honduras (Dyson).

I am not acquainted with this little species. The figure is about double the natural size.

D. PAXILLUS, Reeve. Pl. 14, fig. 92.

Shell short and stout, the spire acuminated at the apex; whorls concave round the top, with a small keel, very closely plicated in the middle, interstices between the folds finely striated, ridged round the base, sinus large; chocolate-brown. Length, 9 mill.

Habitat unknown.

Notwithstanding some difference in form and the much smaller size I think it very probable that this will prove to be synonymous with *D. fuscescens*; the sinus, however, is said to be large, whereas in the latter it is very small.

D. ATERRIMA, Sowerby. Pl. 14, figs. 78, 79, 80, 83, 84; Pl. 32, figs. 45, 46.

Shell very dark chocolate, with sometimes a narrow white line above the periphery, but this is usually absent; spire lengthened or short; whorls rudely prominently keeled on the periphery, which is nodulous; below the keel are a few raised revolving lines, occasionally broken up into granules. Length, 15 mill.

Panama to *Gulf of California.*

The great variation in the proportions of this shell has caused a number of synonyms to be made, and the confusion has doubtless been increased by the uncharacteristic figure given by Reeve (fig. 79). I add better illustrations from Weinkauff's monograph

Digitized by Google

(Pl. 32, figs. 45, 46). *D. atrior*, C. B. Adams, *D. discors*, Sowb. (Pl. 14, fig. 80), a variety with elevated spire, and strong nodules on the periphery, *D. Melchersi*; Menke (fig. 83), *D. rustica*, Carpenter, and *D. zonulata*, Reeve (fig. 84), are synonyms. In the latter, which may be considered a variety, there is a narrow yellowish band, and the revolving ridges are more prominent than in the type; it is *Pl. cincta*, Sowerby, not Lamarck. In *D. cerithoidea*, Carpenter, and its synonym, *D. maura*, Kiener, not Sowerby (Pl. 14, fig. 78), the spire is somewhat exserted, an accidental variation which occasionally obtains in most species having a raised spire.

D. QUADRIFASCIATA, Gray. Pl. 14, fig. 82.

Shell pyramidal, whorls encircled with a single keel above and below, longitudinally closely ridged in the middle; keels whitish, middle of the whorls bluish brown, ridges whitish; aperture small; canal very short. Length, 11 mill. *Habitat unknown.*

I am not acquainted with this species. The figure is about double the natural size.

D. PARDALIS, Hinds. Pl. 14, fig. 81.

Shell longitudinally ribbed, ribs curved, interstices with fine revolving striæ; lip crenulated within; chocolate-brown, ribs conspicuously fulvous yellow. Length, 15 mill.

Gulf of Nicoya, W. Coast Central America.

D. LUCTUOSA, Hinds. Pl. 14, fig. 86.

Shell solid, dark chocolate-color, with very fine revolving striæ, scarcely apparent without a glass, and a single row of minute tubercles on the periphery, which also appears on the spire-whorls; no longitudinal ribs.

Mazatlan to *San Pedro, Cal.*

The locality "Bay of Guayaquil" given by Hinds, needs confirmation.

D. SCARABÆUS, Reeve. Pl. 14, fig. 87.

Shell stoutly ovate, spire short, apex raised, smooth, spire obsoletely hexagonal towards the apex; dark chestnut-brown, last whorl encircled with a narrow yellowish zone; apex white. Length, 11 mill. *Honduras* (Dyson).

I do not know this shell.

Digitized by Google

D. NIGERRIMA, Sowb. Pl. 14, figs. 91, 89, 88, 94.

Shell very dark chocolate; whorls longitudinally ribbed, the ribs terminating on a nodulous periphery, above which the surface is smooth and slightly concave, lower portion of body-whorl with revolving striæ. Length, 22 mill.

Panama to *Mazatlan*.

D. cornuta, Sowb., is founded upon a specimen in which the callous deposit at the top of the aperture is very thick. *D. unicolor*, Sowb. (fig. 89), *D. rustica*, Sowb. (fig. 88), *D. tiarella*, Kiener (Pl. 32, fig. 19), *D. rugifera*, Sowb. (Pl. 12, fig. 22), and probably *D. Hanleyi*, Carpenter (described from a single immature specimen), are identical.

Var. HARFORDIANA, Reeve. Pl. 14, fig. 94.

Whorls with a narrow yellowish band on the periphery. *D. obvellata*, Carpenter, described from a single young shell, is probably equivalent to this variety.

D. BICOLOR, Sowerby. Pl. 14, fig. 100.

Shell chocolate-brown, with a yellowish band just below the periphery; sculpture as in other species of this group.

Length, 20 mill. *Panama; Galapagos Islands.*

D. GRANULOSA, Sowerby. Pl. 14, fig. 1.

Whorls concave and smooth above the periphery, ribbed below it, ribs crossed by fine granulated revolving lines; light yellowish or pinkish brown. Length, ·75 inch.

Panama, Bay of Montija.

D. PALLIDA, Sowerby. Pl. 14, fig. 8.

Ribs deflected at the periphery but continuous to the suture, sharp and rather close, interstices with fine revolving striæ; sinus broad and deep; canal very short, a little recurved; white.

Length, 20–30 mill. *Panama.*

D. ZEBRA, Lamarck. Pl. 14, figs. 2, 6, 5, 11, 12, 7, 10; Pl. 15, figs. 15, 18.

Shell orange-, chestnut- or chocolate-color, the duplicate rows of tubercles on the periphery white, with frequently one or two inferior white bands on the tubercles of the lower part of the body-whorl. Length, 20 mill. *West Indies.*

A very common species, referred by Kiener to Mauritius, and

Digitized by Google

by Weinkauff to E. Africa, possibly through mistaking for it poor examples of *D. Barkliensis*. Weinkauff attempts to separate Kiener's figure of *D. zebra* from that given by Reeve, and refers the latter, as a synonym, to *D. ornata*, d'Orb.; but Kiener's figure represents the ordinary West Indian form quite as well as does that of Reeve. There are a number of synonyms: *D. albinodata*, Reeve (fig. 5), having the periphery more sharply angulated than usual, the figure magnified, *D. albocincta*, C. B. Adams, *D. albomaculata*, d'Orb. (fig. 11), which E. A. Smith changed to *D. albopustulata*, under the impression that the species (above mentioned) described by C. B. Adams, bore the same name as d'Orbigny's, *D. ornata*, d'Orb. (fig. 12), *D. zebroides*, Weinkauff (fig. 15), *D. pulchra*, Gray (fig. 18, magn. $\frac{2}{1}$), *D. Jayana*, C. B. Adams, *D. cinerea*, Weink. (fig. 10), *D. collaris*, Sowb. (fig. 7).

As will be seen from a comparison of the above figures *D. zebra* is a very variable species; one of its extreme forms may be separated as

Var. LEUCOCYMA, Dall. Pl. 34, fig. 2.

Compared with *albomaculata*, d'Orb., it is more slender, with the periphery-angle bearing a pair of close revolving ribs, more conspicuous than the rest of the spiral sculpture and tipped with white where crossing the longitudinal ribs.

Sarasota Bay, W. Fla.

In the typical *albomaculata* the coloring is similar, but a single broader rib revolves at the periphery; in some specimens, however, there is a more or less distinct impressed line on the middle of the rib, so approximating it to this variety.

D. OSTREARUM, Stearns. Pl. 34, fig. 79.

Concavely, rather narrowly shouldered, with a thread-like raised line at the suture, closely longitudinally ribbed below the periphery, decussated by raised revolving lines; dingy yellow to purplish black. Length, 16 mill.

W. Coast of Florida (on oysters).

Figured for the first time, from a specimen in Coll. Acad. Philad.

D. CANCELLATA, Gray. Pl. 15, fig. 19.

Whorls keeled at the upper part, transversely very finely

Digitized by Google

ridged, ridges cancellated with longitudinal striæ; aperture small; jet-black, ridges dirty white. Length, 10 mill.

St. Vincent, W. I. (Guilding).

I do not know this species; the figure is about double the natural size.

D. Dysoni, Reeve. Pl. 14, fig. 3.

Chestnut-brown, upper part of whorls here and there interruptedly white-banded. Length, 21 mill.

Honduras (Dyson).

Shell with stronger keel, lighter and more inflated than *D. fuscescens:* differing also in having a broad sinus and scarcely any canal. I have not seen it.

D. Lysidia, Duclos. Pl. 14, fig. 4.

Shell smooth and white above the periphery, below it with narrow white ribs upon a rose-red ground, connecting below with revolving rows of white tubercles. Length, 12 mill.

Habitat unknown.

Figured, but not described, as a Columbella.

D. Lamberti, Montrouzier. Pl. 13, fig. 76.

Shell yellowish brown, with a central reddish chestnut band, filled with a double series of revolving white-tipped tubercles; below this, on the body-whorl, is a second narrower band, bearing a single series of small white tubercles, and a brown line and spots at the base. Length 10 mill.

N. Caledonia.

D. mucronata, Reeve. Pl. 15, fig. 14.

Shell acuminately pyramidal, whorls somewhat obscurely plicately ribbed, ribs nodulous, aperture short; brown, middle row of nodules whitish. Length, 8 mill.

Habitat unknown.

Described from a single shell having no well-marked characters; it may be a variety of *D. fuscescens.*

D. Clionellæformis, Weinkauff. Pl. 15, fig. 16.

Yellowish, longitudinally plicate, the plicæ whitish, closely covered by revolving lines; whorls contracted and unilirate at the suture. Length, 22 mill.

Habitat unknown.

Digitized by Google

D. CANTHARIS, Reeve. Pl. 15, fig. 22.

Shell thick, solid, smooth; whorls oblique, nodosely plicated round the middle; sinus rather large; very dark brown, nodules whitish. Length, 11 mill.

Philippines.

Evidently described from a stunted specimen. The figure is double the natural size.

D. NITIDA, Kiener. Pl. 15, fig. 20.

Shell ovate, rather stout, smooth, shining; yellowish, painted with brown revolving lines, rose-tinted at the apex; upper whorls of the spire delicately plaited; lip simple, contracted in the middle. Length, 10 mill.

Habitat unknown.

D. RUBIGINOSA, Hinds. Pl. 15, fig. 17.

Whorls six, somewhat rounded, with revolving striæ; reddish brown. Length 7·5 mill.

Straits of Malacca, in mud, 17 fms. (Hinds).

This and the preceding species are aberrant forms of the group Crassispira.

D. MARAVIGNÆ, Bivona. Pl. 8, fig. 12.

Whorls usually somewhat round-shouldered, shell finely flexuously longitudinally plicate, plicæ about twenty; lip usually externally varicose, sinus wide; yellowish- or reddish-brown, shining, sometimes banded. Length, 12 mill.

Mediterranean Sea, *Bay of Biscay.*

The synonymy includes *Fusus semicostatus*, Cantraine, *Pl. incrassata*, Dujardin, *Pl. crebricostata*, Hinds, *Pl. incisa*, Reeve (figured), *Pl. elegans*, Scacchi.

The following are unfigured species of the Crassispiræ, which I am unable to arrange.

D. MICROSTOMA, E. A. Smith. *Ceylon.*

D. MELANACME, E. A. Smith (? = young *D. zebra*). *St. Vincent, W. I.*

D. LATIZONATA, E. A. Smith. *Habitat unknown.*

D. CARIBBÆA, E. A. Smith. *Cuba.*

D. ATRAMENTOSA, E. A. Smith. (Near *P. discors*, Sowb.) *Panama.*

Digitized by Google

D. FLAVOCARINATA, E. A. Smith. (Sculpture like *discors*.)
Panama.

D. NODATA, C. B. Adams. *Jamaica.*

D. CLIMACOTA, Watson. *Tongatabu.*

Section DRILLIA (typical).

The sections of Drillia are all artificial and unsatisfactory—this more so than the preceding ones, as it merely includes those species which cannot be properly placed under the foregoing groups. Some of them resemble the Alatæ so closely that they might almost as well go into that group, others are only distinguished from the section Clavus by the presence of spiral sculpture, whilst others again can only be separated from Crassispira by arbitrarily fixing the precise degree of solidity necessary to enter that group. The great confusion which reigns regarding the synonymy and mutual relations of the Pleurotomidæ forbids anything approaching a definite arrangement of the species at present; indeed the material is absolutely insufficient. My present essay towards a natural grouping of the species will, I hope, pave the way for better work hereafter. In no other group of the family have the results of my studies been so unsatisfactory as in the one now to be considered.

D. SPLENDIDULA, Sowb. Pl. 10, fig. 72.

Whorls smooth, longitudinally ribbed below the tuberculate periphery, tubercles and ribs slight, the latter curved, and white upon a brownish rose-colored surface. Length, 28 mill.

Galapagos Islands.

D. SPECTRUM, Reeve. Pl. 11, fig 83.

Snowy white, the nodules tinged with light brown; sinus broad and shallow, not produced; outer lip sharp.

Length, 17·5 mill. *Philippines* (Cuming).

A pale, obliquely ribbed species, rather thin.

D. PUTILLUS, Reeve. Pl. 11, figs. 85, 97.

Yellowish white, chestnut-tinted between the slight longitudinal ribs; the tuberculate periphery forms a strong angle on the whorls; lip simple, thin, sinus broad and shallow.

Length, 15 mill.

Philippines, 15 fathoms, coarse sand (Cuming);
N. Australia (Brazier); *China Sea* (Ads. and Reeve).

Digitized by Google

D. albicincta, Ad. and Reeve (fig. 97), is a more highly colored adult, with the peripheral row of tubercles whitish; I find no other difference.

D. REGIA, Beck. Pl. 11, fig. 80.

Periphery with a double row of nodules, the whorls smooth above and granulated below it; sinus small; whitish maculated with chestnut. Length, 25–35 mill. *Amboina, Moluccas.*

D. SINENSIS, Hinds. Pl. 11, figs. 84, 94, 5, 6, 9; Pl. 12, fig. 11.

Whorls numerous, convex, slightly angulated and noduled on the periphery, flexuously longitudinally ribbed below and cancellated by raised revolving lines; suture bordered by an obliquely nodulous band; yellowish or flesh-brown, sometimes narrowly dark-banded at the suture and base; interior yellowish.

Length, 1 inch.

New Guinea, Straits of Macassar, China Sea (Hinds); *Philippines* (Dunker); *Japan* (Dunker); *Australia* (Angas, Brazier, etc.).

Weinkauff's figure of this species scarcely represents it. The synonyms are *D. intertincta*, E. A. Smith (fig. 94); *D. Metcalfei*, Angas (fig. 5); *D. consimilis*, E. A. Smith (fig. 11); *D. Coxi*, Angas (fig. 6); *D. spicata*, Hinds (fig. 9).

D. SACRA, Reeve. Pl. 11, fig. 89.

Shell rather solid, somewhat gibbous towards the base; whorls depressed above the nodulous periphery, longitudinally granosely ribbed below it, with minute revolving ridges; canal very short; sinus broad; yellowish white, the last whorl with a central light chestnut band. Length, 1 inch. *Habitat unknown.*

Closely allied to the last species in form, but differs in the better developed ribs and in coloration.

D. PERADMIRABILIS, E. A. Smith. Pl. 11, fig. 96.

Yellowish white, stained with brown beneath the suture, brown-banded on the middle of the body-whorl, irregularly spotted and dotted with a lighter tint over the rest of the surface, but leaving a narrow, plain white zone on the periphery and another just below the brown band; whorls obliquely plicated, with close revolving liræ finely granulated, and separated by deep-cut striæ.

Length, 23 mill. *Japan.*

Digitized by Google

D. INTERMACULATA, E. A. Smith. Pl. 11, fig. 90.

Shell shining, subpellucid, white, with four revolving series of brownish yellow dots between the ribs on the body-whorl, and two on those of the spire; ribs slight, no revolving striæ.

Length, 10 mill.

Japan.

D. FLAVONODULOSA, E. A. Smith. Pl. 11, fig. 99.

Solid, pale fleshy white, with two narrow reddish brown bands; coarsely longitudinally ribbed, and spirally lirate, liræ of irregular sizes, some of them nodulous. Length, 9·5 mill.

Japan.

D. JAPONICA, Lischke. Pl. 11, fig. 88.

Spire elevated, acute, with a ridge below the sutures; longitudinal ribs about eight, rounded, oblique, crossed by close strong striæ, and terminating above on the periphery; yellowish brown with two chestnut bands, or the lower one broader so as to cover the lower portion of the body-whorl; sinus small, but rather deep. Length, 1 inch.

Japan, Hong Kong.

A fine specimen before me has two decided varices on the body and one on the penultimate whorl. The original specimens were imperfect and figures have been published by E. A. Smith and Weinkauff (figured), the former from a worn and rather uncharacteristic specimen, the latter excellent. Weinkauff considers the unfigured *D. latifasciata*, Sowb., a synonym.

D. RARICOSTATA, Smith. Pl. 11, fig. 2.

Shell horny brown, the whorls excavated above and somewhat margined at the suture, with a few strong, oblique ribs, terminating above at the periphery, last whorl obliquely grooved at the base. Length, 10 mill.

Japan.

D. LONGISPIRA, E. A. Smith. Pl. 11, fig. 3.

Whorls with six longitudinal ribs, oblique, subnodulous on the periphery, which they surmount, but do not reach the suture, spirally striated; whitish, with two bands of chestnut spots between the ribs on the spire-whorls, and a third band in addition upon the lower part of the body-whorl.

Length, 16·5 mill.

Japan.

Digitized by Google

D. HUMILIS, E. A. Smith. Pl. 11, fig. 4.

Whorls strongly excavated above, with granules beneath the suture, periphery nodulous, below which are nine oblique longitudinal ribs, the body-whorl is striate towards the base only; yellowish brown, with a rather broad chocolate central band, ribs tipped with white. Length, 9 mill.

Japan.

Said to resemble a dwarfed *D. obliquata*, Reeve, but has fewer volutions and the apical ones much larger, the form is less robust and the coloring is different in detail.

D. OBLIQUATA, Reeve. Pl. 11, fig. 1 ($\frac{2}{1}$).

Yellowish brown, within and without, with a narrow lighter band on the periphery, and sometimes a row of white dots on the ribs a little below the middle of the body-whorl; a few revolving striæ at the base. Length, 14 mill.

Persian Gulf, Ceylon, Singapore, Japan.

D. SUBOBLIQUATA, Smith. Pl. 11, fig. 100.

Shell horny brown, with a narrow white band at the periphery, and a second subinterrupted one on the body-whorl below the middle. Length, 18 mill.

Japan.

More slender than *D. obliquata*, the upper concave portion of the whorls narrower, the costæ more numerous, crossed by revolving striæ (wanting in *D. obliquata*), the basal canal broader.

D. CANDENS, E. A. Smith. Pl. 11, fig. 8.

White, shining, subpellucid; whorls eight, nuclear smooth, normal ones obliquely ribbed, with here and there fine spiral striæ requiring a glass to make them out; lower part of body-whorl obliquely grooved; sinus very wide and deep.

Length, 12 mill.

Japan.

D. DENSEPLICATA, Dunker. Pl. 11, fig. 7.

Shell yellowish brown, the whorls strongly shouldered and closely ribbed, crossed by larger and smaller revolving striæ; lip thick, subsulcate within; sinus rather deep.

Length, 13 mill.

Bass Straits.

Digitized by Google

D. OBLIQUICOSTATA, Reeve. Pl. 12, fig. 12.

Longitudinal ribs oblique, narrow, a little waved, obtusely pointed on the periphery; a few revolving striæ at the base of the body-whorl; yellowish white, spotted and maculated with chestnut. Length, 16 mill.

Habitat unknown.

A species which evidently has no especial characteristics. I am not acquainted with it.

D. CROCATA, Reeve. Pl. 12, fig. 13.

Shell pyramidally oblong, transversely elevately striated, longitudinally ribbed, last whorl furnished with a small gibbous tubercle, canal very short, aperture short, sinus broad, large; whitish, covered with a saffron-olive epidermis.

Length, ·8 inch.

Habitat unknown.

This shell is unknown to me, but appears closely related to *D. Sinensis*, Hinds.

D. AQUATILIS, Reeve. Pl. 12, fig. 16.

Shell ovately turreted, solid, spire acuminated, whorls smooth, depressed round the upper part, obliquely plicately tubercled; canal very short, sinus large; ivory-white, painted with bands of extremely fine pale horny brown waved lines.

Length, ·75 inch.

Habitat unknown.

D. PALLIATA, Reeve. Pl. 12, fig. 15.

Shell ovately oblong, whorls rather convex, transversely very finely closely striated, encircled with a single row of conspicuous rather elevated granules; canal very short; whitish, covered with a pale fulvous epidermis. Length, 13·5 mill.

Habitat unknown.

D. EXARATA, Reeve. Pl. 12, fig. 14.

Shell granose at the intersection of longitudinal and revolving sculpture, the granules taking a spiral direction, minutely noduled on the periphery; canal very short, truncated, sinus large; pale fulvous color, brown-dotted between the ribs.

Length, 13·5 mill.

Habitat unknown.

Digitized by Google

D. VARICOSA, Reeve. Pl. 12, fig. 17.

Whorls smooth near the suture, longitudinally ribbed below, with large rude scattered varices, sinus broad and rather deep; ribs grayish on a darker surface, sometimes entirely brown.

Length, 1 inch.

Philippines, Australia.

Notwithstanding some differences in the descriptions, I think it probable that this species is identical with *D. Japonica*, Lischke; if so, the latter name will become a synonym.

D. ALBICOSTATA, Sowb. Pl. 13, fig. 57.

Rose-colored, the longitudinal ribs white, close-set, no spiral sculpture; aperture callous above; sinus rather deep.

Length, 22 mill.

Galapagos Islands.

D. SOLOMONENSIS, E. A. Smith. Pl. 12, fig. 23.

Differs from *D. varicosa* in being narrower, with angulated ribs, longer and narrower aperture and canal, and in color, having dark brown stripes between the ribs, and a series of brown spots on an infrasutural keel. Length, 23 mill.

Solomon's Isles (Brazier).

Sometimes slightly varicose.

D. PYRAMIDATA, Kiener. Pl. 12, fig. 34; Pl. 13, fig. 67.

Shell Cerithiiform, strongly corded on the periphery, smooth above it, except a narrow granulated sutural band, below with oblique slight ribs and revolving striæ; chocolate, the peripheral and sutural nodes whitish; interior chocolate, with a white band.

Length, 1 inch.

W. Africa.

D. OBELISCUS, Reeve. Pl. 12, fig. 21.

Shell stouter than the preceding species, lower portion of the last whorl granosely ridged; canal short; sinus large; whitish, covered with a yellowish olive epidermis. Length, 1 inch.

Habitat unknown.

I have not seen this species.

D. WILMERI, E. A. Smith. Pl. 12, fig. 24.

Sharply keeled and noduled on the periphery, with revolving striæ below it, stronger towards the base; whitish, stained with

Digitized by Google

chestnut at the apex and on the lower part of the body-whorl, a row of chestnut dots between the nodules of the periphery.

Length, 16 mill.

Andaman Islands.

D. TRAILLI, Hutton. Pl. 34, fig. 90; Pl. 12, fig. 37.

Spire acute, with broad, shallow, spiral grooves, and prominent transverse ribs on the central and anterior portions of the whorls; posterior margin, near the suture flat; aperture oval, canal short; yellowish brown or chestnut-color; body-whorl shorter than the spire. Length, 1·1 inches.

Stewart Island, N. Zealand, 24 fms. (Hutton);
New South Wales (Angas).

Figured from a specimen sent to me by Prof. Hutton. *D. æmula*, Angas (Pl. 12, fig. 37), is identical.

D. LAUTA, Pease. Pl. 12, fig. 31.

Periphery nodose, nodules rather prominent, longitudinally disposed, surface concave above; canal short, open; sinus broad and deep; yellowish chestnut, with a white band on the periphery and a red chestnut line running on the middle of it, one or two narrow white bands below on the body-whorl, each indistinctly narrowly bordered with red chestnut on either side.

Length, 9 mill.

Viti and *Paumotus Is.*

D. EXILIS, Pease. Pl. 15, fig 25; Pl. 12, fig. 32.

Whorls nearly plane, longitudinally plicately ribbed, the ribs small and close, descending from the sutures; aperture very short; canal short and open; reddish chestnut, the ribs whitish, with a dark band below the middle of the body-whorl.

Length, 5·5 mill.

Viti, Cook's and *Paumotus Isles.*

D. pusilla, Garrett (Pl. 12, fig. 32), is a synonym.

D. PYGMÆA, Dunker. Pl. 34, fig. 89.

Shell stouter, the spire shorter, more convex and obtuse than in the preceding species, the whorls not constricted above; sculpture and coloring same as in *D. exilis*.

Viti Islands.

Although remarkably similar to *D. exilis*, the form will, on comparison, readily distinguish it.

Digitized by Google

D. PAPILLOSA, Garrett. Pl. 12, fig. 33.

Whorls eight, slightly constricted round the upper portion, covered by large rounded granules; base contracted, spirally ridged; canal short, obtuse; sinus large, deep and rounded; yellowish white, with three obscure light chestnut bands on the body-whorl. Length, 6 mill.

Viti Islands.

D. MINUTISSIMA, Garrett. Pl. 12, fig. 29.

Shell minute, solid; whorls six, the spire moderate, covered with close granules formed by revolving lines decussating low longitudinal ribs; aperture truncated below; sinus large; reddish brown. Length, 2 mill.

Viti Islands.

D. SUBAURIFORMIS, E. A. Smith. Pl. 12, fig. 35.

Whorls well rounded, sometimes slightly angulated on the periphery, spire rather long, acute; obliquely longitudinally closely costate, crossed by spiral liræ, the intersections becoming subgranulous; spiral liræ more conspicuous at the base; lip thickened without, lirate or dentate within; sinus wide; yellowish white, brown-banded at the suture, and lower part of the body-whorl similarly colored. Length, 9·5–12·5 mill.

Japan.

D. TEXTA, Dunker. Pl. 9, fig. 42.

Shell small, with close ribs and revolving striæ; suture profound; aperture slightly coarctate, outer lip thickened, sulcate within; sinus wide; yellowish brown, with a chestnut band below the middle of the body-whorl. Length, 8 mill. *Japan.*

Perhaps a variety of the preceding species.

D. FORTILIRATA, E A. Smith. Pl. 12, fig. 36.

Whorls twelve, slightly convex, with ten or eleven coarse oblique ribs crossed by very prominent spiral liræ, forming compressed large nodules; below the middle of the body-whorl the ribs become evanescent and the spiral sculpture finer and closer; sinus small; horny or dirty white, aperture horn-colored, sometimes slightly lirate within the outer lip. Length, 14 mill.

Japan.

D. MOQUINIANA, Montrouzier. Pl. 9, fig. 43.

Shell with flattened whorls, obliquely longitudinally costate, the costæ fading towards the upper part and base of the body-

Digitized by Google

whorl, with close revolving lines; sinus moderate and rounded; canal very short, recurved; color yellowish white, marked with chestnut, and with also scarcely apparent lines of chestnut.

Length, 12 mill.

New Caledonia.

D. TRIPTER, von Maltzan. Pl. 30, fig. 80.

Light violaceous; sinus wide and shallow. Length, 23 mill.

W. Coast of Africa.

D. BALLISTA, von Maltzan. Pl. 30, fig. 90.

Wax-yellow; narrowly sinuate, sinus pretty deep.

Length, 18·5 mill.

W. Coast of Africa.

D. BUCHANANI, Hutton.

Shell fusiform, elongated; spire acute; periphery angulated, above it the whorls are concave and smooth, with a slight ridge at the suture, below the angle with oblique ribs and spiral striæ; aperture oval, canal produced; body-whorl longer than the spire; light rosy, fuscous between the ribs. Length, 21 mill.

New Zealand.

First described by Hutton as a tertiary fossil; afterwards by E. A. Smith, from recent specimens, under the name of *D. maorum*. Not figured.

D. AWAMOAENSIS, Hutton. Pl. 12, fig. 25.

Shell small, thin, turreted, yellowish white; whorls eight-and-a-half, the first ones smooth and convex, afterwards slightly carinated; longitudinally finely ribbed, and spirally lirate; upper part of whorls not concave; canal moderate, aperture elongately oval, posterior sinus very slight. Length, 13 mill.

New Zealand.

Distinguished from *D. Buchanani*, by the whorls being less angulated and without the smooth concave shoulder and the suture not margined. First described as a tertiary fossil. Figured from a recent specimen sent to me by Prof. Hutton.

D. PATAGONICA, d'Orbigny. Pl. 13, figs. 46, 47.

Shell yellowish brown, first whorls globose, third and following ones subangulated, with longitudinal short, fine ribs and close revolving striæ, the ribs obsolete on the body-whorl; sinus broad and shallow. Length, 1 inch.

Patagonia.

Digitized by Google

Martens describes a var. *Magellanica*, differing only in being half the above size.

D. STUDERIANA, Martens. Pl. 13, fig. 48.

Shell stouter than the preceding species, with shorter body-whorl; the ribs stronger and fewer, evanescent on the body-whorl, the revolving lines slighter, scarcely apparent; canal shorter and broader. Length, 22 mill.

Kerguelen Island.

D. LOPRESTIANA, Calcara. Pl. 13, figs. 66, 59.

Whorls seven, with revolving carinæ, the interstices longitudinally striate; sinus wide; whitish, apex brown-stained. Length, 8 mill.

Mediterranean Sea.

D. crispata, as figured by Reeve (fig. 59), is a synonym; as well as several other specific names, some of which are for fossils; *Tarentini*, Phil., *Renieri*, Scacchi, *moniliger*, Cantraine, *tricinctum*, Calcara, *Trecchi*, Testa.

D. KENNICOTTI, Dall. Pl. 13, fig. 69.

Shell solid, white, with traces of thin yellowish epidermis; no longitudinal ribs; lip deeply excavated below the suture, margin thin and sharp; columella twisted. Length, 21 mill.

Unga Island, Shumagin Group, Alaska.

Much resembles *Pl. declivis*, Martens, from Japan. If identical, the latter name will become a synonym.

D. CORUSCA, Reeve. Pl. 13, fig. 60.

Shell rather pyramidal, highly polished; upper portion of the whorls flat, clouded with reddish brown and white, lower portion more prominent, encircled with a row of irregular reddish brown dots, last whorl encircled with two rows of dots; aperture short; canal very short. Length, ·75 inch.

Philippines (Cuming).

Two specimens only of this singular shell were obtained; it differs much from the ordinary type of Drillia, the form being more like a Daphnella, but it appears to be a thick species.

D. VEXILLUM, Reeve. Pl. 13, fig. 72 (2).

Shell closely ribbed, and with revolving ridges at the base;

Digitized by Google

yellowish, the lower half of the body-whorl, and a narrow lower portion of those of the spire chocolate-brown. Length, 11 mill.

Pt. Jackson, Australia (Angas).

D. ARATA, Reeve. Pl. 15, fig. 27 (♀).

Shell pyramidal, sutures peculiarly excavated; whorls very closely encircled with narrow granulous ridges; aperture small; yellowish white. Length, 9 mill.

Habitat unknown.

The ridges are said to be more granulous towards the apex. I am not acquainted with the species.

D. PAGODA, Reeve. Pl. 15, fig. 23.

Shell pyramidal, whorls depressed at the upper part, slightly angled, ribbed at the angle, ribs short, close-set, decussated throughout with raised lines; ashy red, stained with dark red spots between the ribs, lip and columella stained with dark red; canal short. Length, 8 mill.

Habitat unknown.

D. TURRIS, Reeve. Pl. 15, fig. 30 (♀).

Pyramidally acuminated, whorls longitudinally stoutly ribbed, transversely very finely ridged, aperture short; olive-brown. Length, 8 mill.

Habitat unknown.

First described and figured by Reeve under the name of *Pagoda*—already used by himself for the preceding species.

D. DONATA, Hinds. Pl. 15, fig. 26.

Whorls eight, rose-colored, ribs small, rather sharp, oblique, whitish, fading towards the suture; back of the last whorl smooth; canal short. Length, 8 mill.

New Guinea.

D. FULVA, Hinds. Pl. 13, fig. 65.

Shell fulvous; whorls six, granulous, tubercularly ribbed, angulated at the upper part; suture with a granulous line. Length, 6 mill.

Straits of Macassar (Hinds).

D. MINUTA, Tenison-Woods. Pl. 34, fig. 93.

Shell minute, fusiform, turreted, elongate, thin; yellowish or

Digitized by Google

pink or reddish chestnut throughout; whorls six, convex, spirally many-keeled, between the keels thickly and slenderly longitudinally lirate; apex of two subinflated whorls which are spirally and equally striate; aperture shorter than the spire, elongately ovate, outer lip thin, sinuous, inner lip inconspicuous.

L. 3, lat. 1 mill.

Tasmania.

Figured from a specimen sent to me by Mr. C. E. Beddome.

Section CONOPLEURA, Hinds.

D. STRIATA, Hinds. Pl. 8, figs. 6, 7.

Spire turreted, the shoulder of the whorls somewhat tabulate, with numerous septa crossing to the sutures, shoulder-angle somewhat coronate; surface finely spirally striate; sinus broad and deep; whitish or yellowish. Length, 19 mill.

New Guinea, 7 fms., mud (Hinds).

One of Reeve's figures shows a reversed shell, a rarity in this genus.

The following unfigured species are described as species of Drillia:—

D. ZEALANDICA, E. A. Smith. *New Zealand*

D. Cheesemani, Hutton, is a synonym.

D. CHOCOLATUM, E. A. Smith. *Japan.*
D. MINDANENSIS, E. A. Smith. *Philippines.*
D. ROTUNDICOSTATA, E. A. Smith. *Habitat unknown.*
D. SUBOCHRACEA, E. A. Smith. *China seas* (probably).
D. NODILIRATA, E. A. Smith. *Philippines.*
D. ATKINSONI, Tenison-Woods, 1875. *Tasmania.*
D. ATKINSONI, E. A. Smith, 1877. *Habitat unknown.*

If the last two are both good species, Mr. Smith's specific name will need changing.

D. ANGUSTA, E. A. Smith. *China Sea.*
D. MULTILIRATA, E. A. Smith. *? Port Jackson, Austr.*
D. INCERTA, E. A. Smith. *New Guinea.*

Digitized by Google

D. PRATTII, E. A. Smith. *Habitat unknown.*
D. EXCAVATA, E. A. Smith. *Habitat unknown.*
D. CONCOLOR, E. A. Smith. *Moluccas; China.*
D. INCONSTANS, E. A. Smith. *Japan.*
D. TUBEROSA, E. A. Smith. (Resembles *varicosa*, Reeve.) *Japan.*
D. GYPSATA, Watson. *New Zealand.*
D. BRACHYTONA, Watson. *Aru Island.*
D. FLUCTUOSA, Watson. (Allied to *Studeriana* and *Patagonica*, Martens.) *Kerguelen.*
D. BULBACEA, Watson. *New Zealand.*
D. SPICEA, Watson. *Off Pernambuco.*
D. ULA, Watson. *N. E. from N. Zealand.*
D. STIROPHORA, Watson. *Near Pernambuco.*
D. PHÆACRA, Watson. *Near Pernambuco.*
D. TMETA, Watson. *Off Pernambuco.*
D. INCILIS, Watson. *St. Thomas, W I.*
D. EXCULPTA, Watson. *St. Thomas, W. I.*
D. THOLOIDES, Watson. *Off Pernambuco.*
D. AMBLIA, Watson. *St. Thomas, W. I.*
D. AGLAOPHANES, Watson. *St. Thomas, W. I.*
D. LOPHOESSA, Watson (and var. PLATIA). *Pernambuco.*
D. BICOLOR, Gray. *Habitat unknown.*
D. CLATHRATA, Gray. *Habitat unknown.*
D. SUTURALIS, Gray. *Habitat unknown.*
D. EBOREA, Gould. *Kikaia Island.*
D. RUFESCENS, Dunker. *Upolu.*
D. NODIFERA, Pease. *Sandwich Islands.*
D. NODULOSA, Pease. *Polynesia.*
D. LÆVIS, Hutton. *New Zealand.*
D. MASTERSI, Brazier. *New Guinea.*
D. SPALDINGI, Brazier. *Torres Sts., Australia.*
D. WELDIANA, Tenison-Woods. *Tasmania.*
D. AGNEWI, Tenison-Woods. *Tasmania.*
D. TÆNIATA, Tenison-Woods. *Tasmania.*
D. TRICARINATA, Tenison-Woods. *Port Jackson, Austr.*
D. POLYTORTA, Dall. (413 fms.) *Off Cape S. Antonio, Cuba.*
D. NUCLEATA, Dall. *Caribbæan Sea.*
D. SUBSIDA, Dall. *Caribbæan Sea.*

Digitized by Google

D. EXASPERATA, Dall.	(1002 fms.)	*Off Cape S. Antonio, Cuba.*
D. ? LEUCOMATA, Dall.		*Caribbæan Sea.*
D. GRATULA, Dall.		*Caribbæan Sea.*
D. DETECTA, Dall.		*Caribbæan Sea.*
D. SERGA, Dall.		*Caribbæan Sea.*
D. SMIRNA, Dall.		*Off Cape S. Antonio, Cuba.*
D. OLEACINA, Dall.		*Caribbæan Sea.*
D. HAVANENSIS, Dall.		*Off Havana; Yucatan Strait.*
D. VERRILLII, Dall.		*Caribbæan Sea.*
D. PERIPLA, Dall.		*Yucatan Strait.*
D. ELUSIVA, Dall.		*Yucatan Strait.*
D. MORRA, Dall.		*Off Havana.*
D. PUNCTATOSTRIATA, Carpenter.		*Bay of Panama.*
D. APPRESSA, Carpenter.		*Cape St. Lucas, L. California.*

Genus SPIROTROPIS Sars., 1878.

S. CARINATA, Philippi. Pl. 7, figs. 94, 93.

Shell white, whorls slightly excavated above, angulated and carinated on the periphery; sinus broad, deep and remarkably distinct, with the upper edge thickened. Length, ·75 inch.

Mediterranean Sea to *Norway.*

Jeffreys thus describes the animal: Body cream-color; pallial tube short; tentacles cylindrical, short and slender; eyes black, small but very distinct, placed on the tops of stalks which are united to the tentacles and are one-half their length; foot proportionally large, almost equally broad throughout, squarish in front, and bluntly pointed behind.

First described as a Sicilian tertiary fossil, and often known under the catalogue-name of *P. modiolus*, Jan.

Genus BELA (Leach) Gray, 1847.•

Prof. Verrill has carefully reviewed the American species of Bela (Trans. Conn. Acad., v, 457–486), elucidating, as satisfactorily as possible, the synonymy of this very variable group of shells. His connection with the U. S. Fish Commission has given him opportunities for the study of their characters, such as have been enjoyed by no other naturalist. He says: "Each

Digitized by Google

species of the genus seems to have a longer and a shorter form, which often differ decidedly in appearance. This variation, which is also seen in many other genera of spiral shells, is probably, to a certain extent, sexual; but it is not entirely so, for while the males seem usually to be long-spired, with narrower and flatter whorls, I have also found males among the short-spired ones. Moreover, there are, evidently, geographical races or varieties, as well as irregular individual variations, and peculiarities due to injuries of various kinds."

B. SCHANTARICA, Middendorff. Pl. 34, fig. 76; Pl. 30, figs. 96, 97; Pl. 29, fig. 56; Pl. 33; fig. 70.

Shell whitish or flesh-white, under a livid olivaceous epidermis; smooth, or with fine spiral striæ; aperture violaceous to white. L. 12, diam. 8 mill.

Norway to *Alaska*.

The synonymy is large, including *B. gigas* (Beck, MS.), Verkrüzen (fig. 97), *B. lævigata*, Dall (fig. 96), and I think *B. tenuilirata*, Dall, described as a variety of *B. lævigata*, with revolving striæ, and afterwards called *simplex*, by Verrill, from a specimen dredged, in 365 fathoms, off Martha's Vineyard. *B. simplex*, Middendorff (Pl. 29, fig. 56), shell narrower, with longer spire, does not appear to me to present even varietal characters. *B. Mörchi*, Leche (Pl. 33, fig. 70), is another name for *B. gigas* as figured by Verkrüzen, whilst for a variety differing in the more produced, curved canal, the typical *gigas* of Beck, Mörch has proposed the name *gigantea*. Mr. Dall's *B. lævigata* is much smaller than the type, with shorter spire, and may constitute a geographical race or variety. According to Mr. Dall *B. arctica*, A. Ad., should be added to the synonymy.

B. BICARINATA, Couthuoy. Pl. 28, figs. 32–34; Pl. 27, figs. 18, 26, 31.

Whorls six or seven, the lower ones obtusely, the upper ones more acutely carinated, upper whorls with riblets on the subsutural band, sometimes crossing the carina, becoming obsolete on the body-whorl; fine revolving striæ cross the growth-lines, and give the shell a finely decussated appearance; a single revolving ridge on the spire below the shoulder-carina, and several less

Digitized by Google

8638
Nov. 4, 1874

MANUAL

OF

CONCHOLOGY;

STRUCTURAL AND SYSTEMATIC.

WITH ILLUSTRATIONS OF THE SPECIES.

BY GEORGE W. TRYON, JR.

CONSERVATOR OF THE CONCHOLOGICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

VOL. VI. part-4.

Part.....

PHILADELPHIA:

Published by the Author,

ACADEMY OF NATURAL SCIENCES, COR. 19TH & RACE STS.

Digitized by Google

ADVERTISEMENT.

I propose to compile a Conchological Manual, which, whilst more comprehensive than any similar work hitherto published, shall be so condensed in text and illustration that it may be issued at a much more moderate price. It will include, in systematic order, the diagnoses of all the genera and higher divisions of the mollusca, both recent and fossil, and the descriptions and figures of all the recent species; together with the main features of their anatomy and physiology, their embryology and development, their relations to man and other animals, and their geological and geographical distribution.

The material at my disposal for the purpose of working up this comprehensive plan is ample and unexcelled:

I.—The Library of the Academy of Natural Sciences of Philadelphia contains almost every separate work ever published upon the subject, together with the various volumes of voyages and travels, of general natural history, and especially scientific periodicals, and the published transactions of learned societies throughout the world. For Conchological purposes this library is almost complete, and it is very rarely that its shelves do not afford any reference desired.

II.—The Conchological Museum of the same institution ranks among the largest in the world in the number of species represented, whilst in the richness of its geographical suites, the number of specimens illustrating varietal forms, etc., it is probably the finest collection extant.

It is intended to arrange and describe the valid species in accordance with their inter-relationships, and it is hoped that by so doing their number may be greatly reduced. Every genus and every recent species will be fully illustrated, so far as specimens or hitherto published figures will enable me to do so. The experienced skill of the artists who have undertaken to furnish the illustrations (of which 30,000 to 40,000 will be required), will sufficiently guarantee the accuracy of this department of the Manual.

In the preparation of the text every care will be taken to discover and correct, and to avoid, error: but it may be reasonably apprehended that the performance of such an immense work must be in many respects inferior to

Digitized by Google

prominent ones on the penultimate and body-whorl; chestnut to violaceous brown. Length, 8·5–11 mill.

Cape Cod, Mass., to *Greenland; Iceland, Norway, Spitzbergen.*

Jeffreys declares the previous species closely allied to this and Leche makes them identical specifically.

B. violacea, Mighels and Adams (figs. 33, 34), differs from the typical form only in being a little larger and stouter, with the two carinæ on the upper whorls less evident; this is due partly to erosion, partly to age; the perfect young of the species being typical, the adults or eroded young of the form *violacea*. The synonymy includes *B. cylindracea*, Möller, *B. Beckii*, Möller, *B. livida*, Möller (Pl. 27, fig. 26), *B. Grœnlandica*, Reeve (Pl. 27, fig. 18, $\frac{5}{2}$), *B. brevis*, Leche, *B. ventricosa*, Mörch, and *B. rugulata* (Möller), Reeve (Pl. 27, fig. 31).

B. NOVAJA-SEMIJENSIS, Leche. Pl. 33, fig. 66.

Shell yellowish ash-color; finely and equally decussated by longitudinal and revolving lines; whorls with a narrow shoulder. Length, 8 mill.

Nova Zembla.

B. PYRAMIDALIS, Ström. Pl. 30, fig. 92; Pl. 28, figs. 40, 47; Pl. 27, fig. 30; Pl. 33, fig. 72; Pl. 34, fig. 81.

Shell with usually a rather high spire, seven or eight tolerably convex whorls, scarcely or not at all shouldered, ribs 13 to 16, sigmoid, fading out about or above the middle of the body-whorl; there are numerous, fine, close revolving lines, sometimes not apparent on the ribs; pale chestnut-color, when fresh. Length, 13 mill.

Massachusetts to *Greenland; Iceland, Norway, Spitzbergen, Nova Zembla.*

Varies considerably in the elevation of the spire and in stoutness, as well as in the development of the ribs. Prof. Verrill doubts the identity of *B. pleurotomaria*, Couthouy (Pl. 30, fig. 92) with this species, and considers *B. pyramidalis*, as figured by Sars (Pl. 28, fig. 40), at any rate different from *pleurotomaria;* but I find all the forms that have been referred to this species by Jeffreys, Leche and others well within the usual varietal limits of similar species. I therefore consider the fol-

Digitized by Google

lowing as additional synonyms: *B. semiplicata*, Sars (Pl. 28, fig. 47), a varietal name, *B. discors*, Brown, *Fusus rufus*, Gould, not Montagu (Pl. 34, fig. 81), *B. Vahli*, Möller (Pl. 27, fig. 30), and *B. Jenisseensis* (Pl. 33, fig. 72) and *lævior*, Leche, described as varieties.

B. ALASKENSIS, Dall. Pl. 34, fig. 5.

Whorls well rounded, slightly shouldered, obliquely ribbed, the ribs waved near the suture, and obsolete on the lower half of the body-whorl, with very minute, close revolving striæ; reddish or purplish brown, under a thin olivaceous epidermis; aperture brown, polished, smooth. Length, ·8 inch.

Alaska.

Described as a Mangilia, with a doubt as to whether it may not be a Bela. Through Mr. Dall's kindness I have examined the type, and think it better placed in Bela.

B. ALEUTICA, Dall. Pl. 34, fig. 4.

Shell pure white, narrow, of seven shouldered whorls, bearing 13 or 14 longitudinal ribs, terminating in a carina at the shoulder, with very faint close spiral grooves passing over the ribs. Length, ·68 inch.

Alaska.

Figured from one of the type specimens. Described as a Mangilia.

B. EXPANSA, Sars. Pl. 29, fig. 52.

Whorls five, finely decussated; spire short; whitish. Length, 9 mill.

Norway.

Its peculiar form will immediately distinguish it.

B. EXIGUA, Jeffreys. Pl. 33, fig. 73.

Shell rather solid, but translucent, somewhat glossy, milk-white; delicately decussated by close, fine striæ; suture deep; last whorl obtusely shouldered near the mouth. Length, 5 mill.

Faroë Channel.

Said to differ from *B. tenuicostata*, Sars (= the next species), by its narrower form, straight longitudinal lines or striæ, and very blunt spire; the fissural groove also, is much shallower.

Digitized by Google

B. DECUSSATA, Couthouy. Pl. 29, figs. 55, 60, 65, 69; Pl. 27, figs. 21, 25; Pl. 28, figs. 35, 36; Pl. 30, fig. 94.

Shell ovate-fusiform, with a moderate, scarcely turreted spire; whorls six or seven, round-shouldered; with about 24 sigmoid longitudinal ribs, evanescing about the middle of the body-whorl, close revolving striæ cross the ribs; sinus well marked, close to the suture; canal narrowed, but short; columella nearly straight in the middle; color white, yellowish or pinkish white.

Length, 9 mill.

New England, northwards; *Labrador; Greenland; Nova Zembla.*

This is *B. scalaris* (Vahl) of Reeve (Pl. 27, fig. 21) afterwards changed to *B. borealis*. *B. leucostoma*, Reeve (Pl. 27, fig. 25), *B. reticulata*, Vahl, according to Reeve.

B. tenuicostata, M. Sars (Pl. 28, figs. 35, 36), differs only in being smaller, with more numerous ribs. Verrill also describes a var. *pusilla*, having the ribs less prominent and not so much bent at the shoulder, giving the shell a smoother appearance. Another variety is *B. viridula*, Möller not of Reeve, and of which *B. Kobelti*, Verkruzen (Pl. 30, fig. 94), is a synonym; it is more strongly ribbed with a better defined shoulder than the type, the ribs straighter. *B. incisula*, Verrill (Pl. 29, fig. 65), appears to me to be no more than a stunted, shouldered variety, with straight ribs, approaching *B. Kobelti*. *B. hebes*, Verrill (Pl. 29, fig. 69). and *B. pygmæa*, Verrill (Pl. 29, fig. 60), are also varietal forms, having slight distinctive characters, which will appear by comparing the figures; the latter is evidently from its small size and fewer whorls a young specimen. *B. Trevelyana*, var. *Smithii*, Jeffreys, is considered by Verrill a doubtful variety of his *B. incisula*.

B. PINGELII, Möller. Pl. 29, fig. 64.

Shell slender, with elongated spire, and moderately convex whorls, with numerous longitudinal, rather straight ribs, excurved above, and strong, elevated spiral lines, forming nodules where they cross the ribs; pale chestnut-brown, with the canal and columella whitish. Length, 11–12 mill.

Maine; Greenland; Norway.

Not unfrequently confounded by authors with the next species,

Digitized by Google

and perhaps with *B. pyramidalis*, but readily distinguished by its high spire, want of shoulder, and its nodulous surface.

B. CANCELLATA, Mighels. Pl. 29, figs. 67, 53; Pl. 28, fig. 46.

Whorls nine, somewhat convex, narrowly obtusely shouldered; ribs strong, flexuous, with a sigmoid curve at the shoulder, crossed by coarse spiral cinguli; white, stained rosy or light chestnut, or yellowish. Length, 15–20 mill.

Massachusetts; Greenland; Norway; Nova Zembla.

Often confounded with allied species, and especially with *B. Pingelii*, above, and with *B. pyramidalis*, *B. harpularia*, and *B. Gouldii*. *B. pyramidalis* has a more slender spire, and the spiral sculpture is less developed; *B. harpularia* is less elongated, with straighter ribs and finer revolving lines; *B. Gouldii* has more shouldered whorls, nodulous at the angle, straight ribs, and longer canal. It must be confessed that these distinctions are rather arbitrary, and that the interests of science would have been promoted if many of the so-called species of Bela had not been described. *B. elegans*, Möller (Pl. 29, fig. 53), and *B. angulosa* (Pl. 28, fig. 46) of Sars, may be considered slight variations of this species.

B. SARSII, Verrill. Pl. 28, fig. 49.

This name was proposed for the species figured by Sars for *B. cancellata*. The whorls are obtusely shouldered, the ribs fewer and stronger, and nearly straight, crossed by rather distant revolving grooves, giving it a coarsely cancellated or tesselated subnodulous surface. Length, 10 mill.

Norway; Labrador?

B. CINEREA, Möller. Pl. 28, fig. 48.

Shell scarcely shouldered, with numerous narrow ribs, and many spiral striæ; aperture broadly truncate below.

Length, 22 mill.

Greenland, Iceland, Spitzbergen.

Barely distinguishable from the last species.

B. DECLIVIS, Lovén. Pl. 28, fig. 38.

Shell longer in the spire and narrower, proportionally, than *B. cinerea*, with slightly stronger shoulder, fewer ribs and

Digitized by Google

revolving striæ, the sculpture cancellated; aperture broadly truncate below. Length, 22 mill.

Norway, Faroë Islands.

Var. *augustior*, Jeffreys, is said to be narrower and smaller.

B. OBLIQUA, Sars. Pl. 28, fig. 50.

Shell turriculated, with shouldered whorls, the shoulder acute and tuberculated by the terminations of thirteen to sixteen narrow oblique ribs, having much wider interspaces which are covered by revolving striæ; aperture rather short, broadly truncate below. Length, 10 mill.

Norway.

B. TURRICULA, Montagu. Pl. 30, fig. 93; Pl. 27, fig. 22; Pl. 28, figs. 41, 44, 45; Pl. 29, fig. 57; Pl. 33, fig. 60.

Shell narrow, turriculated, the shoulder acute, with the ribs strongly projecting above it and then running across to the sutures; ribs about sixteen, nearly straight, prominent, crossed by very close, rather fine revolving striæ; aperture rather narrow; canal narrow and produced. Length, 17 mill.

Europe, Nova Zembla, Greenland.

B. scalaris, Möller, *B. scalaroides*, Sars (Pl. 28, fig. 59), *B. Woodiana*, Möller?, *B. harpularia*, var. *rosea*, Sars (Pl. 28, fig. 37), are synonyms of the typical form. *B. Dowsoni* and *robusta* of S. V. Wood are here referred by Dr. Jeffreys; and among the older names may be cited *B. alba*, Pennant, *B. angularis*, Donov., and *B. discrepans*, Brown. *B. nobilis*, Möller (Pl. 28, fig. 41), and its synonym *B. angulata*, Mörch, designate a variety with more strongly marked shoulder on the whorls. *B. exarata*, Möller, and *B. harpularia*, Sars, not Couth. (Pl. 28, fig. 45), *B. rugulata*, Sars (Pl. 33, fig. 60), *B. assimilis*, Sars (Pl. 28, fig. 44), and perhaps *B. mitrula*, Lovén (Pl. 29, fig. 57), are synonyms.

B. HARPULARIA, Couthouy. Pl. 29, fig. 51.

Shell slightly round-shouldered, with 17–20 low oblique ribs and fine revolving striæ; pale reddish brown or rosy, when fresh, frequently yellowish or white. Length, 13–17 mill.

Long Island Sound to *Nova Scotia.*

This species is often confounded with the preceding one, but differs in its obtusely rounded shoulder, lower and more numerous

Digitized by Google

ribs, usually lower spire, finer spiral sculpture, etc. Towards its northern limit it becomes rather rare, according to Prof. Verrill. Sars' figure of *B. harpularia* appears to represent a variety of *B. turricula*.

B. AMERICANA, Packard. Pl. 33, fig. 64; Pl. 29, fig. 68.

Shell thin, inflated, body-whorl rather wide, spire short; shoulder strongly defined, with the ribs crossing it; ribs 13 to 15, rather high and narrow, somewhat oblique, with wider interspaces; revolving sculpture very distinct on the interspaces, less distinct on the ribs; whitish or yellowish white.

Length, 18–20 mill.

Cape Cod to *Greenland*. ? *Norway*.

The shell figured by Sars as *B. nobilis*, Möller, juv. (fig. 42) appears to = this species, but fig. 19 in the Moll. Norv. better represents *B. turricula*. The shell very usually occurs under the latter name in American collections, but appears to differ sufficiently in its shorter, wider form, thinness, etc. *B. turricula* is essentially European in distribution; *B. Americana*, on the contrary, American.

Var. GOULDII, Verrill. Pl. 29, fig. 68.

Ribs sharper, more produced on the shoulder-angle, no spiral lines on the shoulder, those on the middle of the body-whorl fewer and more distant than in the typical form.

Massachusetts to *Nova Scotia*.

B. IMPRESSA, Beck. Pl. 33, fig. 69.

Shell wide, with short spire, and sloping but rather well-defined shoulder; densely costulate longitudinally, crossed by about ten spiral riblets, forming a cancellated surface; yellowish ash-color. Length, 15 mill.

Spitzbergen; Nova Zembla.

B. CONCINNULA, Verrill. Pl. 29, fig. 54; Pl. 27, fig. 27.

Shoulder sloping, the angle not acute; ribs numerous, often 20 to 25, crossed by strong spiral lines, forming a nodulous surface, including the shoulder; whitish under a pale greenish epidermis. Length, 10–11·5 mill.

New England to *Nova Scotia*.

The sloping shoulder, less defined carination, tuberculated

Digitized by Google

surface and canal distinguish this from *B. exarata* (a form of *B. turricula*). A var. *acuta* is described by Prof. Verrill as having a more slender form, with a longer and more acute spire and narrower aperture, the whorls more flattened, the nodules on the shoulder more prominent and sharper, and the carina higher; there are intermediate forms between this and the type. It is the *B. mitrula* of Verrill, not Lovén. *B. Möllerí*, Reeve (Pl. 27, fig. 27), is a rather problematical species, which Petit refers to *B. Trevelyana*, and Jeffreys to *B. exarata*, Möll. It appears to me to agree better with this species; it is a young shell, the figures being about twice its natural size, and its identification with *B. concinnula* is not sufficiently certain to authorize a change of name.

B. TREVELYANA, Turton. Pl. 33, fig. 65; Pl. 27, fig. 29.

Shell somewhat thin, ovately fusiform, subventricose; whorls six, slightly planate above the carina; aperture nearly equally contracted above and below; outer lip a little insinuate below the shoulder; surface lightly decussated by inconspicuous longitudinal plications, evanescent below the middle of the body-whorl, and close, fine revolving striæ; whitish. Length, 8–13 mill.

Europe, Spitzbergen, Nova Zembla, Boreal America.

A smaller, more fragile and more delicately sculptured species than *B. turricula*, with shorter spire, and more oval form. The synonymy includes *B. decussata*, Macgill. (Pl. 27, fig. 29) and *B. reticulata*, Brown. The latter name has priority, but may be regarded as obsolete. A variety *Smithii*, described by Jeffreys, is doubtfully referred by Verrill to *B. incisula*, Verrill (= *decussata*, Couth. var.).

B. CONOIDEA, Sars. Pl. 29, fig. 61.

Shell narrow, with long spire; whorls seven, convex, without carina; plications slight, somewhat sigmoid, almost obsolete on the body-whorl: everywhere covered with moderately strong revolving striæ; white. Length, 15 mill.

Norway.

B. LYCIACA, Forbes. Pl. 27, fig. 28.

Shell rather shortly fusiform, whorls convex, narrowed at the upper part, longitudinally ribbed, with revolving elevated striæ,

Digitized by Google

the alternate ones rather larger; aperture lanceolately ovate; canal rather long, straight. Length, 6 mill.

Cape Artimesium, Coast of Asia Minor, 80 fms. (Forbes).

This species (evidently immature) has not been obtained since.

B. FIDICULA, Gould. Pl. 32, fig. 17.

Whorls seven, broadly shouldered; about twenty-four longitudinal plications, crossed and decussated by more crowded delicate revolving lines; dirty-white. Length, ·45 inch.

Puget Sound.

B. SUBLUTA, Gould. Pl. 33, fig. 18; Pl. 34, fig. 75.

Shell thin, turreted, with elevated spire; whorls seven or eight, slightly round-shouldered; there are twelve obtuse ribs not quite reaching the sutures, the interstices showing evanescent, epidermal, revolving lines; pale ash, stained with light yellowish brown, tip of beak and interior dark chestnut, with a narrow white fascia. Length, 10 mill.

Habitat unknown.

This shell is possibly Patagonian; it has the peculiar appearance of the Magellanic molluscan fauna. I think that the Patagonian *B. Cunninghami*, Smith (fig. 75), will prove to be a synonym.

Unfigured and undetermined species of Bela.

B. PLICIFERA, Wood (Crag Mollusca.) This species has, according to Leche, been found living. The original figure and description will apply sufficiently well to a dozen recent forms, and the identification of it must therefore be considered very doubtful.

B. ROBUSTA, Packard (fossil). *Labrador.*

B. UNDATELLA, Gould. *Off Coast of Georgia*, 400 fms.

B. TURGIDA, Gould. *Kamtschatka.*

B. BLAKEANA, Dall, and vars. NORMALIS and EXTENSA. *Caribbæan Sea.*

B. FILIFERA, Dall. *Caribbæan Sea.*

B. HARVEYI, Verkrüzen. *Newfoundland.*

B. GILPINI, Verkr. *Bay of Fundy.*

B. MULTICOSTATA, Verkr. *Bay of Fundy.*

Digitized by Google

B. UNDATA, Verkr. *Bay of Fundy.*
B. BRACHYSTOMA, Pfeiffer. (Adams' Genera, i, 92).
B. PULLA, Reeve. (Adams' Genera, i, 92.)
B. EXCURVATA, Carpenter. *Puget's Sound.*
? B. RUBESCENS, Jeffreys. *Holsteinborg.*
B. JESSOENSIS, E. A. Smith. *Japan.*
? B. MITRALIS, Adams and Angas. *Port Jackson, Australia.*
? B. AUSTRALIS, Adams and Angas. *So. Australia.*
B. WILLEI, Friele. *Arctic Ocean.*
B. OVALIS, Friele. *Arctic Ocean.*
B. VIRIDULA, Reeve, not Möller (Pl. 27, fig. 20.) *Greenland.*

Mörch considered this a synonym of *Columbella Holbolii*, Beck = *rosacea*, Gould. See Manual, v, p. 160.

Section TYPHLOMANGELIA, Sars, 1878.

B. NIVALIS, Lovén. Pl. 7, fig. 92.

Shell turreted, with a long spire; white; whorls ten, the periphery tuberculated longitudinally, the ribs which give rise to them very short; covered by close revolving striæ; shoulder of the whorls slanting. Length, ·85 inch.

Shetland, Norway.

Section HÆDROPLEURA, Monterosato, 1883.

B. SEPTANGULARIS, Montagu. Pl. 21, figs. 8, 9 ?; Pl. 22, fig. 42.

Shell subulate, smooth, without shoulder; longitudinal plicæ seven or eight, including the varicose lip, short, low, not attaining the middle of the body-whorl, but starting from the suture; pinkish white. Length, 14 mill.

Europe.

Differs from the true Belas in several particulars, besides distribution, and has the general appearance of Mangilia; but must be separated from that genus (in our very artificial classification), on account of having an operculum. The synonymy includes *B. costata*, Donov., *B. secalina*, Phil. (Pl. 22, fig. 42), a small form, and *B. Petitii*, Maravigna, which = the latter. *B. Ginnaniana*, Reeve, not Risso (Pl. 21, fig. 9), is here referred by Forbes and Hanley—a very doubtful identification.

Digitized by Google

B. RUFA, Montagu. Pl. 32, fig. 35.

Whorls seven, rather convex, very slightly shouldered; ribs 14 or 15, narrower than the interstices; surface covered with fine close revolving striæ; chocolate-brown, the ribs lighter colored.

Length, 13 mill.

Europe.

The synonymy is enormous, including *B. Kieneri*, Marav., *B. chordula*, Turton (juv.), *B. nigra*, Potiez et Mich., *B. fusca*, *B. discors*, *B. castanea* and *B. discrepans* of Brown, and perhaps also *B. alba* and *B. minima* of the same author.

Jeffreys distinguishes the following varieties:—

Var. LACTEA. Shell white.

Var. SEMICOSTATA. Lower whorls ribless; shell often larger.

Var. UHLIDEANA, Thompson. Shell orange-brown or fawn-color, with stronger sculpture.

Var. CRANCHII, Brown. Ribs twisted.

Var. ANGUSTA. Shell narrower, and slender, with sharp and oblique ribs.

Subgenus BELOMITRA, Fischer, 1882.

B. PARADOXA. Fischer.

Shell elongately fusiform, whitish, whorls eight, the embryonal obtuse, mammillate, the others slightly convex, angulately carinated in the middle, with about twelve subarcuate longitudinal ribs, which become evanescent below the middle of the body-whorl, and revolving striæ; aperture oblong, narrow; lip obsoletely sinuous behind, smooth within; columella nearly vertical with six or seven oblique narrow plications; canal short.

L. 28, diam. 9; L. apert. 14 mill.

Atlantic, 627 metres.

Locality not given. Unfigured.

Genus LACHESIS, Risso, 1826.

L. MINIMA, Montagu. Pl. 32, figs. 21, 24; Pl. 27, fig. 4.

Shell solid, opaque, rather glossy; ribs nine or ten, crossed by fifteen to twenty broad, flattened spiral ridges on the body-whorl, four on the spire whorls; apex globular, twisted on one side; whorls five to six, rather convex; outer lip varicose without,

Digitized by Google

toothed within, without sinus; color usually reddish brown, sometimes spotted; operculum yellowish. Length, 5–8 mill.

British Channel to *Southern Europe*, *W. Africa*.

The spire is sometimes truncated in live specimens. On the Southern Coast of England and the Channel Islands the species is common but local, in the laminarian zone, upon rocky and stony ground. The animal swims with the foot upwards.

There is a large synonymy: *Fusus turritellatus*, Desh., *Fusus subnigrus*, Brown, *L. mamillata*, Risso (fig. 14), *Pl. Chauveti*, and *Pl. perlatum*, Requien, *Murex Folineæ*, Chiaje, *granulata*, Risso, *Pl. multiplicata* (Forbes), Reeve (Pl. 27, fig. 4), *Buc. Lefebrui*, Marav. There are a number of color varieties distinguished by Jeffreys, Monterosato and Tiberi.

L. VULPECULA, Monterosato. Pl. 33, fig. 67.

Whorls very convex, with deeply impressed sutures, spire longer, canal more pronounced, longer than in *L. minima*, somewhat recurved, aperture not toothed; sculpture strong but narrow, forming a clathrate surface. Length, 5·3 mill.

Mediterranean.

It is *L. recondita*, Brugnone.

L. CANDIDISSIMA, Phil. Pl. 32, fig. 23, 22.

Shell of seven whorls, strongly granulated by decussating sculpture; outer lip toothed within; usually white, sometimes yellowish, or with the granulations darker. Length, 10 mill.

Mediterranean; W. Africa.

The colored variety referred to above is *L. lineolata*, Tiberi (fig. 22) = *L. Massena*, Chiaje, not Risso.

L. FOLINEÆ, Phil. Pl. 32, fig. 25.

Shell ovate-fusiform, of six rather flattened whorls, with shallow longitudinal and revolving grooves, cutting the surface into squares; lip with two remote tubercles; canal suboblique, very short, dilated at the base; surface fuscous, the sulci fulvous or white. Length, 7·5 mill.

Mediterranean (very rare).

This is *L. areolata*, Tiberi, and *Fusus granulatus*, Calcara.

L. PELLIS-PHOCÆ, Reeve. Pl. 27, fig. 3.

Shell with close, fine, longitudinal and revolving lines, lip

Digitized by Google

dentate within; chocolate, with usually a narrow lighter or white line at the suture. Length, 10 mill.

St. Thomas, W. I. (Swift.)

L. JAPONICA, A. Adams. Pl. 34, fig. 78.

Shell with about 20 arcuate longitudinal ribs crossed by rather finer striæ; lip somewhat thickened externally, thin and crenulate at the margin, very faintly sinuated near the suture, with about ten short fine liræ near the edge internally; yellowish white with chestnut stains, or entirely chestnut.

Length, 12 mill.

Japan.

L. TURQUETI, Velain. Pl. 30, fig. 95.

Longitudinal ribs, rounded, rather coarse, crossed by revolving grooves; aperture narrow, canal very short and open, lip slightly thickened, not crenulated within; yellowish brown.

Length, 4 mill.

Isle of St. Paul, Indian Ocean.

Velain calls attention to the resemblance of this shell to the genus Etallonia, formed by Deshayes for eocene species of the Paris basin. Deshayes considered Etallonia between Bulla and Ringicula, but Mr. Velain thinks it should rather be referred to the Pleurotomidæ.

L. MERIDIONALIS, E. A. Smith. Pl. 32, fig. 26.

Whitish, of six convex whorls, turreted; with coarse longitudinal ribs, and revolving grooves, the former obsolete on the lower half of the body-whorl; on the periphery, two stronger grooves cut the ribs into a single series of tubercles; two apical whorls large and smooth. Length, 4·3 mill.

Strait of Magellan.

Unfigured Species.

L. GRANULATISSIMA, Mörch. *W. Coast Central America.*
L. CRATICULATA, Mörch. *Same Habitat.*
L. PERLATA, Mörch. *Same Habitat.*
L. SULCATA, Hutton. *New Zealand.*
L. CANDIDISSIMA, C. B. Ad., *West Indies*, is referred here by H. and A. Adams, but is a Mangilia, probably.

Digitized by Google

Genus BORSONIA, Bellardi, 1846.

In the fossil *Borsonia prima*, the shell is fusiform, the lip not varicose, the columella with a single plait, high up; but in some fossil species there are indifferently one or two plaits, so that Cordiera (= Scobinella) is generally considered synonymous. The following recent species, referred to Borsonia, are now placed here with some hesitation; the plications being usually more numerous, and the shells otherwise resembling that section of Mangilia for which the name Glyphostoma has been proposed. Unfortunately, the operculum of none of the species has been noticed; and I really doubt its existence in any of them. My conviction is that these forms will all be found to be Glyphostomæ, and that the diagnosis of that group will need to be enlarged to include species having several as well as many columellar plications.

B. CRASSICOSTATA, Pease. Pl. 34, fig. 94.

Shell fusiform, shining, longitudinally coarsely ribbed, crossed by revolving raised striæ; whorls rounded, with well-impressed sutures; aperture narrow; outer lip denticulated within; canal short, slightly recurved, light yellow or pink. Length, 7 mill.

Sandwich Islands, Paumotus.

B. BIFASCIATA, Pease.

Shell fusiform, shining, longitudinally coarsely ribbed; crossed by coarse raised striæ; whorls rounded at the sutures; outer lip thick, incurved, serrated on the edges at the termination of the transverse striæ; canal short and slightly recurved; color white; two light brown bands on each whorl.

Sandwich Islands.

Not figured, and I have no specimens; the description may be compared with *B. nigrocincta*, Montr.

B. LUTEA, Pease.

Shell fusiform, solid, shining; whorls convex, angulated at the sutures, longitudinally regularly and closely ribbed, crossed by regular transverse ridges; aperture narrow; outer lip thick, denticulated within; canal produced and recurved; light yellowish brown.

Sandwich Islands.

Unfigured.

Digitized by Google

B. NEBULOSA, Pease.

Shell fusiformly oblong, finely ribbed longitudinally, striated transversely, forming regular granules; sutures slightly angulated and smooth; aperture oval; outer lip slightly incurved and serrated on its edge, striated internally; canal slightly produced and incurved; white, marked with irregular, interrupted, longitudinal brown lines.

Sandwich Islands.

Unfigured.

B. GILIBERTI, Souverbie. Pl. 25, fig. 58.

Shell pink, with a central chestnut band; lip with 7–8 interior plications; columella with 3–4 ascending plications.

Length, 10 ? mill.

Lifou Island, N. Caledonia.

Described from a single specimen.

B. NIGROCINCTA, Montrouzier. Pl. 19, fig. 62.

Yellowish white, with two narrow dark chestnut lines on the body-whorl, the upper one of which appears on the spire; lip with about 5–6 plications within, columella with several (3–4) ascending plications, continuations of the revolving sculpture of the outer surface. Length, 8–9 mill.

New Caledonia (Montr.), *Andaman Is.* (Nevill).

Unfigured Species.

B. CORRUGATA, Pease, MS. Carpenter referred this, as a synonym, to *B. nebulosa*, Pease; but Pease says that this is an erroneous determination, that *B. corrugata* is a unique shell in his collection. It has not been published.

B. PUSILLA, Dunker. *Upolu.*

B. CEROPLASTA, Watson. *St. Thomas, W. Ind.*

B. SILICEA, Watson. *Off Pernambuco.*

II. *Clavatulinæ.*

Genus CLAVATULA, Lamarck, 1801.

C. LELIEURI, Recluz. Pl. 8, fig. 20.

Shell turreted; whorls smooth and concave above, with revolving raised lines below the bicarinated periphery; yellowish brown, the upper portion of the whorls with large brown

Digitized by Google

maculations and a revolving series of small brown spots just above the lower carina. Length, 33 mill.

Senegal.

Very doubtfully distinct from the following species.

C. MURICATA, Lam. Pl. 8, figs. 22, 21, 15–19, 27; Pl. 30, figs. 77, 83.

Upper portion of whorls smooth and concave, with a sutural band of tubercles, sometimes becoming spinose; the periphery angulated, and tuberculate, as well as the body-whorl below it, caused by rude curved longitudinal ribs crossed by revolving sculpture; light yellowish brown, sometimes fasciated; aperture occasionally light violaceous, but mostly white.

Length, 40 mill.

W. Coast of Africa, South Africa.

Varies much in form and in the degree of development of the tubercles and spines; the younger and less robust specimens also have a somewhat longer canal. I include here several specific names heretofore regarded as distinct forms: *C. virginea* (Chemn.), Reeve (fig. 21), is a spineless form, the name of which would have priority, if it were binomial; it is, however, "Murex Turris virgineus," which is not admissable. The name which I have adopted for the whole series of forms is that one which is in most common use, and represents the usual state of the species. Other synonyms are *Murex mitratus*, Wood, *Murex Turris coronatus*, Chemn., *Murex clavatulus*, Dillw., *P. conica*, Encyc. Meth., *C. bimarginata*, Lam. (fig. 15), *C. diadema*, Kiener (fig. 18), a younger and thinner shell, perhaps inhabiting more quiet localities than the heavier specimens; *C. gravis*, Hinds (fig. 16), *C. sacerdos*, Reeve (Pl. 18, fig. 19; Pl. 30, fig. 77), *C. mystica*, Reeve (fig. 27), a very similar form to the last.

Var. RUBRIFASCIATA, Reeve. Pl. 8, fig. 17; Pl. 30, fig. 83.

Shell yellowish brown, banded with bright red and ash-color. Appears to be connected with the typical species through *C. ferruginea*, Maltzan (Pl. 30, fig. 83), described as an entirely ferruginous-colored variety of *C. rubrifasciata.*

C. IMPERIALIS, Lam. Pl. 8, fig. 13.

Shell ovate, short, ventricose, clothed with a thick, dark olive-colored epidermis; whorls angulated above, the angle having a

Digitized by Google

row of scale-like tubercles; columella covered with a thick white callus; interior of aperture stained above and below with violet.

Length, 55 mill.

Cabenda, W. Coast of Africa; 5 fms., in soft mud, washed down by the waters of the Congo.

A rare species, from its appearance probably an inhabitant of brackish water.

C. IMPLICATA, Reeve. Pl. 8, fig. 23.

Shell pyramidally turreted, whorls depressed around the upper part, with revolving rows of nodules below, upper row on the periphery-angle, and duplicate; covered with a thick olivaceous epidermis, aperture whitish. Length, 1 inch.

Habitat unknown.

Described from a single specimen. Its characteristics appear to be the long spire, and double row of tubercles on the shoulder-angle.

C. COLINI, Maltzan. Pl. 30, fig. 84.

Rosaceous, with a superior, and an inferior brown band.

Length, 1 inch.

W. Africa.

A narrower form, with longer spire than any other species except *C. implicata*, from which it may be distinguished by its carina and more pronounced canal, as well as by color. I doubt whether it is really distinct from *C. muricata.*

C. CÆRULEA, Weinkauff. Pl. 5, figs. 59, 60.

Shell narrowly turreted, strongly keeled, the keel tuberculated, with revolving, sometimes granulous striæ below it, the granules more apparent at the base; bluish, the tubercles white, with the interstices purplish. Length, 20 mill.

W. Africa (Maltzan).

According to Maltzan the shell is white, with two corneous-bluish bands. The appearance of the figure, especially of the canal, indicates a young shell.

C. PATRUELIS, E. A. Smith. Pl. 32, fig. 39.

Reddish brown, with a white narrow band on the periphery, and, on the body-whorl, a second inferior band; whorls twelve and a-half, with obsolete flexuous longitudinal plications, crossed

Digitized by Google

by revolving lines; nodulous at the periphery, and less distinctly so inferiorly. Length, 27 mill.

Japan.

I include this species in Clavatula on account of the operculum, which has a subcentral nucleus, rather near the inner margin.

C. TEXTILIS, Hinds. *Straits of Macassar.*

Shortly diagnosed in Zool. Proc., 1843, but not included with the other species in the Moll. of Voy. Sulphur, nor figured in Reeve's Iconica. The species must, therefore, have been either mislaid or discovered to have no claim to recognition. Clavatula, according to Hinds, contained numerous species now excluded from that group.

Subgenus PERRONA, Schum., 1817.

Dr. Fischer has separated Tomella, Swainson, as a subgenus, characterized by spire not carinated, sinus wide near the middle of the outer lip; type, *C. lineata*. The position of the sinus in that species depends upon the extent of the callosity upon the upper part of the inner lip, and the spire is so variable, some specimens of undoubted *lineata* being subcarinate, that I do not think the distinction can be maintained.

C. LINEATA, Lam. Pl. 8, figs. 10, 11.

Shell smooth, body-whorl more or less constricted above, the spire sometimes very short, and sometimes long; whitish or yellowish brown, thickly flexuously longitudinally lineated with chestnut or chocolate. Length, 1–1·5 inches.

W. Africa; Cape of Good Hope.

C. TAXUS, Chemn. Pl. 8, fig. 14; Pl. 32, fig. 15.

Shell yellowish brown, flexuously lineated with chestnut, under a thick olivaceous brown epidermis; whorls constricted above, slightly nodulously longitudinally plicate below, and flexuously longitudinally striate; aperture brownish.

Length, 2·75–4 inches.

Cape of Good Hope.

C. OBESA, Reeve. Pl. 8, figs. 9, 4.

Whorls corded below the suture, with a constriction below the

Digitized by Google

cord; yellowish white, flexuously lineated with chestnut, the corded portion white. Length, 40 mill.

W. Africa.

Possibly only a heavy shelled variety of *C. lineata*. I think that *C. tripartita* (Smith), Weinkauff (fig. 4), is synonymous, as I have specimens intermediate between the two forms.

C. SPIRATA, Lam. Pl. 8, fig. 5.

Whorls constricted around the upper part, with a rather sharp ridge next the suture, and an obtuse angle below the constriction; yellowish, mottled and striped with chestnut.

Length, 1–1·5 inches.

W. Africa.

C. PERRON, Chemnitz. Pl. 8, fig. 8.

Shell fusiform, turreted, rather smooth, pale yellow; whorls flat, with flexuous longitudinal lines, slightly angulated round the upper part, lower portion of the last whorl contracted and with several regular, distant revolving ridges; sinus nearly central. Length, 27 mill.

W. Africa (Marrat).

Is an intermediate form between *C. lineata* and *C. spirata*—which should probably be merged in one species. Chemnitz adopted a Dutch name "the perron," for this species, and Reeve erroneously supposing it to be in honor of a naturalist, changed its form to *C. Perronii*.

C. MONILE, Val. Pl. 7, fig. 96.

Chestnut-brown, with a subsutural band maculated with darker chestnut spots; surface finely decussated with longitudinal and spiral striæ. Length, 1 inch.

Australia.

Pleur. monile being preoccupied by Brocchi for a fossil species, Desmoulins changed the name to *Quoyi;* but the species figured under the latter name by Reeve and Weinkauff appears to me to be very distinct In the present group the specific name *monile* is not preoccupied; I therefore restore it.

C. GRACILIOR, Sowb. (Unfigured.) *Habitat unknown.*

C. TUMIDA, Sowb. (Unfigured.) *Agulhas Bank, So. Africa.*

Digitized by Google

Subgenus CLIONELLA, Gray, 1847.

C. STRIATA, Kiener. Pl. 9, fig. 53.

Shell olive-yellow, longitudinally obliquely ribbed, with fine revolving striæ, lip simple, sinus broad. Length, 1·5 inches.

Habitat unknown.

Schrenck includes this species in his Moll. of Amurl., but very probably, as Weinkauff has pointed out, *Crassispira Clionellæformis* was mistaken for it.

C. ROSARIA, Reeve. Pl. 9, fig. 51.

Shell shortly subulate, truncated at the base, whorls plaited, smooth, aperture short; bright scarlet-rose, uppermost part of the whorls white-zoned. Length, 22 mill.

So. Africa.

C. SIGILLATA, Reeve. Pl. 9, figs. 47, 48.

Shell pyramidally ovate, transversely somewhat obscurely striated; whorls channeled around the upper part, faintly nodosely, obliquely plicated beneath the channel; pale reddish chestnut, aperture and columella yellowish white.

Length, 32 mill.

So. Africa.

C. SEMICOSTATA, Kiener. Pl. 9, fig. 46.

Whorls with shallow channel above, periphery nodulous by the terminations of short, oblique, rather distant ribs; sinus broad; light yellowish brown. Length, 1·75 inches.

So. Africa.

C. SINUATA, Born. Pl. 9, fig. 50.

Whorls with a narrow channel above, the periphery with a row of small nodules, terminating short, low, flexuous plicate ribs; pale rusty brown, under a blackish brown epidermis.

Length, 2 inches. *So. Africa.*

Equally well known under its later name of *C. Buccinoides*, Lam.

C. NUX, Reeve. Pl. 9, fig. 49.

Shell ovate, whorls convex, slightly concave at the upper part, last whorl rather gibbous; canal very short, truncated; sinus rather broad; reddish chestnut, columella and interior white.

Length, ·75 inch.

So. Africa.

Digitized by Google

C. RUBINICOLOR, Reeve. Pl. 9, fig. 55.

Whorls with a nodulous periphery, and shallow shoulder above it; last whorl with slight revolving striæ towards the base; orange-red, nodules whitish. Length, ·75 inch.

Hab. unknown.

Perhaps does not belong to this group.

C. BORNII, E. A. Smith. (Unfigured.) *Cape of Good Hope.*

C. BIPARTITA, E. A. Smith. (Unfigured).
Port Elizabeth, So. Africa.

C. SUBVENTRICOSA, E. A. Smith. (Unfigured.) *So. Africa.*

C. PLATYSTOMA, E. A. Smith. (Unfigured.) *Cape of Good Hope.*

C. KRAUSSII, E. A. Smith. (Unfigured.) *Cape of Good Hope.*

C. QUADRUPLEX, Watson. (Unfigured.) 1000 fms. *W. of Azores.*

Genus PUSIONELLA, Gray, 1847.

P. VALIDA, Dunker. Pl. 31, figs. 9, 10.

Shell smooth, ponderous, whorls 11–12, flatly rounded, with two or three striæ around the upper portion, and several at the base of the body-whorl; light yellowish brown.

Length, 3 inches.

Pacific Ocean ? (Dunker).

This is probably a West African shell as are all the other species of the genus, except *P. rapulum*. I suspect that the young shell which Philippi calls *Fusus candidus* (fig. 10), may belong here; it is W. African.

P. ACULEIFORMIS, Lam. Pl. 31, figs. 2, 3.

Shell elongated, spire-whorls more or less plicately ribbed, sometimes only the upper ones; body-whorl smooth except at the base, where there are revolving grooves; very light grayish yellow, or yellowish brown, or chestnut. Length, 1·75 inches.

W. Africa.

P. Catelini, Petit (fig. 3), is a shouldered variety; many of the specimens exhibit some shoulder on the whorls.

P. VULPINA, Born. Pl. 31, figs. 4–6.

Shell stouter than the preceding species, no longitudinal ribs, upper part of the whorls with two or three engraved revolving

Digitized by Google

lines, and several more at the base of the body-whorl; otherwise smooth and polished, or with microscopic revolving striæ; chocolate-color, sometimes yellowish or orange-brown.

Length, 1·6 inches.

W. Africa.

This species is equally well known as *P. buccinata*, Lam. *P. albocincta*, Petit (fig. 6), is a variety with a median white band; *P. Recluziana*, Petit (fig. 5), is a light-colored variety; *P. grandis*, A. Ad., an unfigured species, is evidently synonymous with the latter.

P. MILLETI, Petit. Pl. 31, figs. 7, 8.

Shell whitish, or yellowish flesh-color, or brown, more or less decussated by longitudinal and revolving engraved lines, sometimes forming granulations—especially on the spire; the revolving lines prominent on the body-whorl, where the longitudinal ones are usually subobsolete. Length, 1·5–2 inches.

W. Africa.

P. subgranulata, Petit (fig. 8), is a synonym, as are also probably the unfigured *P. lirata*, A. Ad., and *P. lupinus*, Phil.

P. RAPULUM, Reeve. Pl. 31, figs. 11, 12.

Shell oblong ovate, the whorls compressedly gibbous, forming a round shoulder, constricted and with revolving striæ towards the base; otherwise smooth, except that the upper whorls of the spire are slightly longitudinally plicate; whitish, under a very thin, smooth, yellowish brown epidermis, often yellowish brown within the aperture; a heavy, white callous deposit at the upper extremity of the inner margin of the aperture.

Length, 1·5 inches.

Malacca (Cuming); *Java* (Petit).

P. Wallaysi, Petit (fig. 12), is a synonym.

P. NIFAT (Adanson) Bruguiere. Pl. 31, figs. 13, 14.

Whorls usually narrowly shouldered above, whitish under a light olivaceous, thin epidermis, with several revolving series of square chestnut spots; base constricted, with a few engraved striæ. Length, 1·5–2·25 inches.

W. Africa; Algiers.

Weinkauff dredged living specimens off the Algerian coast. This is the *Buccinum pusio* of Born and Gmelin, but not of

Digitized by Google

Linnæus; the usual shouldered form is also the *P. scalarina*, Lam.

P. RECURVIROSTRIS, Marrat (unfigured). *W. Africa.*
No dimensions are given. ? = *P. aculeiformis.*

Genus SURCULA, H. and A. Adams, 1853.

With long canal.

S. MACULOSA, Sowerby. Pl. 5, fig. 57.

Smooth, or with light revolving striæ, the shoulder of the whorls angulated and defined by a row of tubercles; flesh-colored, light brown, or light purplish, with chestnut maculations. L. 42, diam. 13 mill.

West Columbia to *Gulf of California.*

S. BRUNNEOMACULATA, Sowb. Pl. 10, fig. 71.

Shell stout, with a more turreted spire and more angulate periphery and stronger nodules than *S. maculosa*, the whorls also more distinctly spirally striate; color yellowish brown with chestnut maculations and interrupted bands.

? *California* (Frick).

Notwithstanding the differences above pointed out, the species is evidently so closely allied to *S. maculosa*, that I have hesitated to keep it separate. I scarcely think that Weinkauff's figure represents the species.

S. AUSTRALIS, Roissy. Pl. 5, fig. 58; Pl. 2, fig. 9.

Shell yellowish white, encircled by corded orange-brown ribs, with several intermediate striæ; outer lip broadly rounded above into the rather shallow sinus. L. 100, diam. 28 mill.

China Sea, Philippines.

S. turris, Val. (fig. 9), is a synonym.

S. ARCUATA, Reeve. Pl. 5, fig. 61.

Shell arcuately fusiform, thin, inflated, rather transparent; whorls lined and sharply keeled round the middle, keel painted with regular brown spots; lip rounded, separated from the last whorl by a broad sinus; canal slender, curved, equaling the length of the spire. L. 43, diam. 13 mill.

Coast of Veragua, Central America (Hinds).

Digitized by Google

S. TORNATA, Dillwyn. Pl. 5, fig. 62; Pl. 6, fig. 81.

Shell smooth, ivory-like, lower portion of body-whorl with revolving striæ, upper portion of the whorls broadly, concavely channeled, sinus broad and shallow; whitish or yellowish, flexuously strigated with light brown. L. 80, diam. 26 mill.

East Indies, Java.

Generally known as *P. Javana*, Linn., but that author's description is of a ribbed shell—which this is not.

Var. FULMINATA, Kiener. Pl. 6, fig. 81.

Shell smaller, proportionally wider, the revolving striæ upon the lower part of the body-whorl stronger; the color variegated by strong flexuous longitudinal strigations or maculations. L. 48, diam. 17 mill.

Java.

Barely distinguishable as a variety.

S. JAVANA, Linn. Pl. 5, figs. 63–65.

Whorls angular and tuberculated in the middle, the tubercles developing from more or less indistinct oblique folds or ribs, everywhere closely encircled by striæ; light yellowish brown, the tubercles lighter. L. 56, diam. 23 mill.

Java, Malacca, Japan.

This is perhaps better known as *S. nodifera*, Lam., the *S. Javana* of authors (not Linn.) being the preceding species—*S. tornata*, Dillwyn. *S. Coreanica*, Ad. and Reeve (fig. 64), is a specimen not fully grown, and *S. lurida*, Ad. and Reeve (fig. 65), is a small, darker hued, banded variety.

S. TUBERCULATA, Gray. Pl. 5, figs. 66, 67.

Whorls angulated, the angle defined by a row of tuberculations, below them are several rows of granular revolving striæ, and towards the base the striæ are continued but not granular; yellowish, punctate with chestnut. L. 25, diam. 9 mill.

Hong-Kong, Japan, Java, Australia.

With this species must be united *S. punctata*, Reeve (fig. 66).

S. OLIVACEA, Sowb. Pl. 5, figs. 69, 70; Pl. 10, fig. 77; Pl. 34, fig. 3.

Shell with 8–10 coarse, rounded longitudinal ribs, forming a knobbed angle on each whorl, where they terminate, encircled

Digitized by Google

by coarse riblets and striæ; interior of outer lip generally showing revolving striæ; yellowish brown, chestnut or chocolate, under a light olivaceous or brownish epidermis, the projecting portions of lighter color. L. 62, diam. 26 mill.

Panama to *Gulf of California.*

P. funiculata, Val. (fig. 70), and *P. duplicata*, Sowb. (fig. 77), are synonyms. The species is a very common one in the Gulf of California and at Mazatlan. Fig. 69, which represents the typical *olivacea*, at first sight would be supposed to be distinct from *funiculata* (fig. 70), and to approach the next species. The shoulder is very narrow, so that the angle is not prominent. I figure an intermediate form from Weinkauff (Pl. 34, fig. 3), which he calls *S. olivacea.*

S. TUBERCULIFERA, Brod. and Sowb. Pl. 5, fig. 68; Pl. 10, fig. 60.

Whorls well rounded with strong rounded ribs, nodules forming a single row on each whorl, with strong revolving striæ; yellowish brown, darker banded above and below the nodules, with some additional brown revolving lines below the lowest band.

L. 63, diam. 22 mill.

Gulf of California.

Described from a specimen not fully grown (Pl. 5, fig. 68). Through the kindness of Mr. R. E. C. Stearns I am enabled to give a figure of an adult of this fine species (Pl. 10, fig. 60). I have a specimen before me uniform yellowish brown, without bands.

S. UNDATIRUGA, Bivona. Pl. 5, figs. 71, 72; Pl. 6, figs. 73, 74.

Whorls angulated in the middle and nodulous on the angle, above it the surface is smooth, below the nodules are continued as flexuose wrinkles or ribs, becoming evanescent towards the base of the aperture; yellowish brown, with usually one or two darker bands. L. 50, diam. 16 mill.

Sicily, Algiers, Spain, Teneriffe, W. Coast of Africa.

This is the *S. balteata*, Beck, of Kiener (fig. 72), *S. corrugata*, Kiener (fig. 74), and *S. tenuis*, Gray (fig. 73). Monterosato considers *corrugata* a synonymn, but he separates *balteata* and *tenuis* as a variety under the name of *similis*, Bivona.

Digitized by Google

S. KADERLYI, Lischke. Pl. 6, fig. 75.

Whorls subangulated with about twelve oblique, rounded, longitudinal ribs below the angle, surface decussated by growth-lines and small revolving striæ; yellowish white, with orange-brown bands on the shoulder, at the base and intermediately—three in all, the upper one appearing on the spire.

L. 67, diam. 24 mill. *Japan.*

S. PAUPERA, Watson.

Fusiform, decussated by spiral striæ and growth-lines, whorls angulated by a revolving row of tubercles, giving rise to short longitudinal ribs, about thirteen in number on the body-whorl; spire high, conical, whorls 10–11; color buff-brown, under a coarse, harsh yellowish epidermis. L. 1·75, diam. ·68 in.

Aru Isl., 800 fathoms, mud.

Dredged by the "Challenger" Expedition, and not yet figured. It is described as a Drillia.

S. CLARA, von Martens. Pl. 6, figs. 77, 77 *a*.

Whorls seven, spirally closely striate, decussated by growth-lines, with a strong spiral carina; sinus short and wide, extending from the carina to the suture; diaphanous white.

L. 36, diam. 13 mill.

Patagonia.

S. CARPENTERIANA, Gabb. Pl. 7, fig. 3.

Shell fusiform, the whorls somewhat flattened, without angle, carina or ribs, surface with close revolving liræ, sometimes alternating in size; sinus a mere sigmoid curve of the outer lip; aperture scarcely narrowed into a canal below. Brownish orange, with broken revolving bands of a light reddish brown; these bands usually occur on the larger liræ, and are most closely placed on the middle of the shell. L. 73, diam. 26 mill.

California.

It is a post-pliocene fossil, of which some specimens, retaining the color (and therefore supposed to be recent) have been obtained on the shore and by dredging.

S. PERVERSA, Gabb. Pl. 6, fig. 79.

Sinistral, elongate, slender, of 11–12 convex whorls, with very flexuose growth-striæ, and fine spiral lines; aperture scarcely

Digitized by Google

canaliculate, the outer lip sigmoid; light reddish brown, under an olivaceous epidermis, with a central broad white band, having ill-defined edges; columella and extremities of the shell also white.

L. 38, diam. 11 mill.

Catalina Isl., Cal.; Straits of Fuca.

S. VINOSA, Dall.

Sinistral, shorter and much less slender than the preceding species, with a shorter canal and proportionally much larger aperture, finely spirally striate; uniform deep wine-brown or claret-color.

Aleutian Islands.

S. SINISTRALIS, Petit. Pl. 13, fig. 64.

Sinistral; ash-brown; lightly decussately striated; sinus broad; canal short. Length, 20 mill.

W. Coast of Africa (Petit).

S. PLUTEATA, Reeve. Pl. 6, fig. 78; Pl. 30, fig. 82.

Shell narrowly fusiform, with elevated, acuminated spire and long, narrow, twisted canal; whorls with a shelf below the sutures, and a central revolving carina of small nodules; horn-color, the nodules white; sinus rather shallow and wide.

L. 30, diam. 7 mill.

Whydah, W. Africa.

Described by Reeve without locality, but I have the same species before me, received from the Liverpool Museum, with the above habitat, with the MS. name *P. mandarina*, Smith.

S. ANNULATA, Reeve. Pl. 6, fig. 83.

Shell solid, with elongated spire and well-formed but rather short canal; whorls cingulated throughout. L. 48, diam. 15 mill.

Habitat?

S. CATENA, Reeve. Pl. 6, fig. 84.

Shell narrow, elongately fusiform, spire turreted, yellowish gray; whorls very convex in the middle as if suddenly swollen, and bearing a row of oblique, white tubercles; lip thin, sinus broad; canal long and straight. L. 58, diam. 15 mill.

Habitat unknown.

With short canal.

S. ASTRICTA, Reeve. Pl. 6, figs, 85, 86 *a*; Pl. 32, fig. 36.

Spire often truncate, the tip acuminate when present, whorls

Digitized by Google

spirally ridged; yellowish white, the superior ridge on each whorl articulated with chestnut and white. L. 16, diam. 6 mill.

Isl. Annaa (Cuming); *Cook's Islands* (Garrett).

This is the *S. interrupta* of Sowerby, not Lamarck; *S. modesta* of Weink., not Sowb. (fig. 86 *a*).

S. CINCTA, Lamarck. Pl. 6, fig. 86.

Spire convex in outline, slightly acuminated towards the tip; whorls encircled throughout with tumid ridges; yellowish brown or reddish brown, aperture same color. L. 14, diam. 5·5 mill.

Real Llejos (probably erroneous), and *Isl. Annaa* (Cuming); *Mauritius* (Weinkauff); *Viti Islands* (Garrett).

This is the *S. modesta*, Sowb., and the shell described and figured under that name by Weinkauff = the preceding species.

S. BIJUBATA, Reeve. Pl. 6, fig. 87.

Shell chocolate-brown, encircled by narrow, lighter-colored keels, the second keel, which is somewhat stronger than the others, often broken up into small tubercles; interior of aperture chocolate-colored. L. 20, diam. 8 mill.

Philippines (Cuming); *Mauritius* (Robillard); *Viti Isles* (Garrett); *Solomon Islands* (Smith).

Distinguished from the preceding species by its narrower form, longer spire, sharper ridges and darker color.

S. RADULA, Hinds. Pl. 7, figs. 89, 88, 90.

Shell dark brown, encircled by ridges of which the one defining the shoulder-angle and those below it are granular or tuberculate; the angle-row usually white; sometimes with chestnut bands. L. 18, diam. 6 mill.

Red Sea, *Malacca*, *Australia*.

S. versicolor, Weink. (fig. 88), is merely a variegated specimen, and *S. raduliformis*, Weink. (fig. 90), has the sculpture not so strongly developed. I am inclined to think that *P. Metcalfei*, Angas, *P. obeliscus*, Reeve, *P. pyramidata*, Val., which I have treated under Drillia, will need to be united with this form when fuller series shall be available for comparison.

Digitized by Google

S. Owenii, Gray. Pl. 7, fig. 91.

Whorls encircled by a row of compressed tubercles at the periphery, and a smaller one beneath the suture; below the periphery granulated by the intersection of fine revolving riblets and close curved growth costæ; cream-brown or nearly white, often orange-tinged at the extremity of the spire.

L. 30, diam. 11 mill.

Australia.

S. Quoyi, Reeve. Pl. 7, fig. 95.

Shell yellowish brown, with a double row of small, compressed nodules on the periphery, above which the surface is slightly concave to a subsutural, slightly nodulous band, which is regularly square-spotted with chestnut; lower part of body-whorl with revolving, fine ridges and striæ.

L. 28, diam. 12 mill.

Australia.

With this species Reeve and Weinkauff unite *P. monile*, Val.; it appears to me more nearly related to the group Perrona.

The following species of Surcula have been described by Rev. Robert Boog Watson in the "Mollusca of the Challenger Expedition." They have not been figured.

P. staminea, Watson. *Kerguelen, Prince Edward Isl.*, etc.
P. trilix, Watson. *Kerguelen* and *Heard Isl.*
P. lepta, Watson. *Southern Ocean, Southeast of Australia.*
(Resembles *P. clara*, von Martens, from Patagonia.)
P. rotundata, Watson. *Pacific, East of Japan.*
P. goniodes, Watson. *Southeast of La Plata.*
(Resembles in a general way *P. circinata*, Dall.)
P. plebeia, Watson. *Off Pernambuco.*
(Something like *P. nodifera*, Lam.)
P. syngenes, Watson. *Off St. Thomas, West Indies.*
P. hemimeres, Watson. *Pernambuco.*
P. anteridion, Watson. *Off Cape of Good Hope.*
P. rhysa, Watson. *Pernambuco.*
P. bolbodes, Watson. *Pernambuco.*
P. ischna, Watson. *Northeast from New Zealand.*
(Resembles *P. emendata*, Monterosato, of the Mediterranean.)

Digitized by Google

III. *Mangiliinæ.*

Genus MANGILIA, Risso, 1826.

M. VAUQUELINI, Payraudeau. Pl. 21, figs. 17, 18.

Shell pale yellowish or almost white, with distant strong ribs; the shoulder with brown dashes or spots, appearing on the ribs only; there is usually, on the body-whorl a central line of spots, also on the ribs. Length, 9–12 mill.

Mediterranean, throughout; Atlantic Coast of Spain, Madeira, Canaries

The synonymy includes *M. rigida*, Reeve (fig. 18), *M. unifasciata*, Costa (not Deshayes), and *Fusus Rossmassleri*, Anton.

Var. BREVIS, Requien (= *nana*, Monts.), is smaller and proportionally shorter than the type.

M. PACINIANA, Calcara. Pl. 32, fig. 33.

Shell with the whorls not shouldered, but ribbed as in the preceding species, not striate; yellowish or whitish, with brown revolving lines. Length, 6 mill.

Mediterranean Sea.

This species is also known as *M. Sandrii*, Brusina.

M. TÆNIATA, Desh. Pl. 21, fig. 13.

Shell smooth, with shouldered whorls; whitish or yellowish brown, with narrow brown revolving lines. Length 9 mill.

Mediterranean Sea.

M. eburnea, Bivona, is a synonym.

M. UNIFASCIATA, Deshayes. Pl. 34, fig. 88.

Shell white, with a broad brown band above the aperture, reappearing on the spire, and another at the base of the body-whorl. Length, 7 mill.

Morea, Algiers.

Weinkauff (Med. Meeres-Conchyl.) states that this species has not been recognized since the publication of the original description and figure, but he thinks it may be synonymous with *Raphitoma costulata*, Blainv.; Monterosato, however, enumerates it among his Algerian shells (Jour. de Conch. 1877, 42).

Digitized by Google

M. BERTRANDI, Payr. Pl. 21, fig. 12; Pl. 32, fig. 47.

Shell chestnut- or chocolate-brown, with usually an indistinct central darker band, ribs often white; whorls rounded above, without distinct shoulder. Length, 9–14 mill.

Mediterranean Sea.

M. cærulans, Phil., is a synonym. The *M. cærulans* figured by Appelius (Pl. 32, fig. 47), and which Monterosato has named *M. indistincta*, does not appear to differ materially; it has not been described.

M. COSTATA, Forbes and Hanley. Pl. 34, fig. 77; Pl. 32, fig. 37.

Shell with 7 or 8 stout ribs; whorls without shoulder; spire varying in length; spire and upper half of the body-whorl chestnut- or chocolate-color, lower half of body-whorl light yellowish brown, sometimes yellowish brown with darker lineations. Length, 12 mill.

Sweden to *Mediterranean.*

Mr. Jeffreys says: "The *Murex costatus* of Pennant is a mixture of small shells belonging to different genera." I follow him in ascribing the name to Forbes and Hanley who have accurately diagnosed the species, rather than to any of those earlier authors who used it indefinitely. The *P. coarctata*, Forbes (fig. 37), is merely a larger form of this species, mainly northern in distribution. *M. pusilla*, Reeve, and *M. balteata*, Reeve, are both made synonyms by Forbes and Hanley; they are described without locality, but the former has shouldered whorls and too many ribs, and the latter has been identified as Australasian by Mr. Brazier, and as West Indian by Mr. Swift.

M. SICULA, Reeve. Pl. 21, fig. 10.

Shell chestnut- or chocolate-brown within and without, with narrow brown lines, more conspicuous on the thickened lip, which is lighter colored; whorls rounded, rather gibbous, those of the spire obtusely angulated. Length, 12 mill.

Sicily, Adriatic Sea.

Pl. plicatum, Phil., is a juvenile.

M. MULTILINEOLATA, Deshayes. Pl. 22, fig. 53.

Longitudinal ribs rather numerous, close together, curved;

Digitized by Google

white, with chestnut, revolving lines, rarely unicolored or unifasciate. Length, 7 mill.

Mediterranean Sea.

M. ALBIDA, Deshayes. Pl. 32, fig. 32.

Shell white, very slightly round-shouldered, with about ten longitudinal ribs, and wider interspaces. Length, 6 mill.

Mediterranean Sea.

Monterosato considers this a distinct species, but Weinkauff refers it to *M. rugulosa*. I have not seen specimens.

M. RUGULOSA, Philippi. Pl. 22, fig. 44.

Shell whitish to yellowish brown, the whorls round-shouldered above, the rude ribs with wider interspaces, crossed by elevated revolving lines, some of them much larger than the rest, and which are sometimes brown. Length, 6 mill.

Mediterranean Sea—England.

The distinctive character of this species, if it be one, is the series of revolving, minute ridges and striæ. *M. Stossichiana*, Brusina, is a synonym, according to Weinkauff.

M. COMPANYOI, Bucq., Dautz. et Dollf. Pl. 33, fig. 62.

Whorls convex, subangular above, with strong, distant ribs, surface covered by extremely fine decurrent striæ, visible only with the microscope; yellowish white, with numerous well-marked, regular, darker, revolving lines. Length, 7 mill.

Roussilon, France.

I have not seen this species; apparently it possesses but slight distinctive characters.

M. SUBCLATHRATA, Maltzan. Pl. 30, fig. 87.

Turreted fusiform, sutures well impressed; ribs eleven, decussated, and rendered nodulous by many undulating spiral riblets; lip thickened, denticulated, sinus small. Length, 6 75 mill.

Isl. Goree, West Coast of Africa.

M. STRUCKI, Maltzan. Pl. 30, fig. 88.

Turreted fusiform, with produced spire and deep sutures; reddish brown; ribs nine, straight, decussated and rendered nodulous by spiral riblets; sinus nearly obsolete, lips thickened and dentate. Length, 5·5 mill.

Isl. Goree, West Coast of Africa.

Digitized by Google

M. GOREENSIS, Maltzan. Pl. 30, fig. 91.

Shell with about eight smooth costæ, and wider interspaces covered by revolving striæ; brownish, with the ribs white towards the aperture. Length, 8 mill.

West Coast of Africa.

M. STELLATA, Stearns. Pl. 34, fig. 84.

Shell turreted, yellowish, tinged more or less with reddish brown; whorls seven, angulated above; suture distinct; with 12 or 13 strong, smooth longitudinal ribs, extending to the extremity of the basal volution, which also shows near its termination a few revolving lines; labrum effuse, externally much thickened, deeply notched near the suture. L. ·35, lat. ·14 inch.

Tampa Bay, W. Florida.

The lip and columella in most specimens are dark ferruginous brown. I may add to the above description that the interspaces of the ribs, in one of the specimens before me, are covered with fine revolving striæ, and that another has a faint central band. It has not been figured hitherto, and I therefore give an illustration from a specimen from Tampa Bay which appears to fairly represent the typical form.

M. LAQUEATA, Reeve. Pl. 18, fig. 30.

Ribs stout, few, remote; sinus not very distinct; dull white. Considerably magnified, but no dimensions given.

West Indies (d'Orbigny).

The figure shows revolving colored lines, which are not mentioned in the description.

M. LUCTUOSA, d'Orb. Pl. 22, fig. 47.

Whorls very slightly round-shouldered, yellowish brown, with about eleven darker longitudinal ribs, the interstices with revolving striæ; aperture and lips dark brown. Length, 11 mill.

Cuba, Guadeloupe.

I am not acquainted with this species. Mr. E. A. Smith has supposed it to be a Drillia, and as the specific name is preoccupied in that genus by Hinds, he has changed it to *P. Cubensis.*

M. PENTAGONALIS, Gray. Pl. 21, fig. 30.

Shell white, smooth, longitudinally five-ribbed, ribs pointed at the shoulder. Length, 6 mill.

St. Vincent, West Indies.

Digitized by Google

M. GUARANI, d'Orbigny. Pl. 22, fig. 46; Pl. 18, fig. 21.

Brownish, sometimes with narrow, lighter bands; ribs prominent, rounded, crenulating the suture; there are elevated revolving lines. Length, 5 mill.

West Indies (Reeve), *Brazil* (d'Orb.).

M. obesicostata, Reeve (Pl. 18, fig. 21), from the West Indies is evidently a synonym.

M. DYSONI, Reeve. Pl. 21, fig. 27.

Whitish, with two faint bands of orange-brown. Length, 9 mill.

Honduras (Dyson).

M. SYMMETRICA, Reeve. Pl. 21, fig. 40.

Whorls shouldered; longitudinally ribbed, the interspaces with very fine elevated striæ; yellowish brown, the shoulder white. Length, 5 mill.

Habitat unknown (Mus. Cuming).

I can add nothing to the information concerning this species.

M. BALTEATA, Reeve. Pl. 24, fig. 11.

Whorls obtusely slightly angulated in the middle; ribs few, narrow, with wide smooth interspaces; white, with a median chestnut zone. Length, 12 mill.

Habitat? (Reeve), *West Indies* (Swift).

Krebs considers *M. densestriata*, C. B Ad., a doubtful synonym; it is a white shell, without band, ribs 10 to 12, more numerous than in the figure of *balteata*, the interstices very finely striate transversely. I am not acquainted with the species, but the characters appear to be sufficiently distinctive. Brazier identifies an Australian shell with *M. balteata*.

M. BADIA, Reeve. Pl. 21, fig. 41.

Shell plicately ribbed, transversely strongly plicated; dark chestnut-brown. Length, 5 mill.

Habitat? (Reeve), *St. Thomas, W. I.* (Krebs).

According to Krebs, *M. crassicostata*, C. B. Ad. (an unfigured species), is a synonym.

M. TRILINEATA, C. B. Adams. Pl. 21, fig. 31; Pl. 18, fig. 36.

Shell narrowly shouldered, with small, close, numerous longi-

Digitized by Google

tudinal ribs and impressed revolving striæ; whitish, with three narrow brown bands, one of which appears on the spire-whorls.

Length, 6 mill.

West Indies.

Described and figured by Reeve as *M. trifasciata*, Gray, a few months later than Adams' description. *M. costata*, Gray (Pl. 18, fig. 36), is the same species without bands, as first determined by Krebs. The latter name being preoccupied by Pennant, Mr. E. A. Smith has recently changed it to *decora*. Krebs thinks that *M. quadrilineata*, Adams (unfigured), also belongs here.

M. ALBOVITTATA, C. B. Ad. Pl. 21, fig. 32.

Ovately oblong, whorls with narrow shoulder; longitudinally strongly ribbed, ribs close-set, obtuse; white, orange banded.

Length, 6 mill.

West Indies.

Described and figured by Reeve a few months later, under the name of *M. luteo-fasciata*, and without locality. Adams includes revolving striæ in his diagnosis; they are not visible on the figure. Hutton erroneously identified with this species a New Zealand shell, afterwards distinguished as *Drillia Sinclairi*, Smith.

M. HORNBECKII, Reeve. Pl. 26, fig. 67.

Shell ovate, spire rather short, acute, sutures deep, somewhat cavernous, longitudinally ribbed, ribs prominent, transversely very minutely striated; white. Length, 10 mill.

West Indies.

The following species, apparently of Mangilia (restricted), have been described as West Indian, etc.; they are unfigured and unknown to me.

M. brevis, *M. biconica*, *M. vicina*, *M. multilineata* (= *M. polyzonata*, H. and A. Ad.), *M. muricoides*, *M. dubia*, *M. fusca*, and *M. candidissima*, all of C. B. Adams. Jamaica.

M. cinctella, Pfeiffer. Cuba.

M. millestriata, E. A. Smith. St. Thomas, W. I.

M. inepta, E. A. Smith. Honduras.

Digitized by Google

M. hypsela, Watson. Off Pernambuco.
M. acanthodes, Watson. Bermuda, Azores.
M. corallina, *M. tiara*, Watson. Near St. Thomas, W. I.
M. macra, Watson. Azores.
M. eritmeta, Watson. Azores.
M. rufocincta, E. A. Smith. Porto Cavallo, So. America.
M. ligata, C. B. Ad., H. and A. Adams, Genera. I have not found any description of this species.

M. INTERLIRATA, Stearns. Pl. 22, fig. 56.

Shell dark reddish brown, solid; whorls eight, with 8–10 strong longitudinal ribs, and 10–12 thread-like, darker colored revolving ribs in the interspaces only; outer lip simple, somewhat thickened. Length, ·27 inch.

Monterey and *San Diego*, *Cal.*

M. HEXAGONA, Gabb.

Shell small, slender, fusiform; spire subacute, nuclear whorls two, smooth, normal whorls five, slightly subangular and ornamented by six large acute radiating ribs with broad, concave interspaces; besides these, the whole surface is cancellated by minute raised lines; color brownish white, ornamented by a few reddish brown revolving bands, one much larger than the rest, in the middle of the whorl; aperture narrow, columella very slightly twisted; outer lip acute, sinus almost obsolete.

L. ·34, lat. ·1; L. apert. ·15 inch.

Monterey, *Cal.* (2 specimens).

M. BELLA, Hinds. Pl. 21, fig. 35.

Shell fusiform, attenuated below, slender, pale yellowish brown; whorls rounded, longitudinally ribbed, crossed with white raised lines, banded with darker brown round the upper part; ribs slender, furnished with small scattered granules, running into a simple suture; lip thickened, sinus small, rather wide. Length, 16 mill.

W. Coast of Central America.

M. STRIOSA, C. B. Adams. Pl. 34, fig. 96.

Shell slender, dingy white, with a rather indistinct narrow central brown band on the body-whorl; longitudinal ribs 10–12,

Digitized by Google

slender, crossed by close elevated revolving lines; lip rather sharp on the edge but thickened behind it by a stout rib.

Length, ·3 inch.

Panama.

Not hitherto figured; my illustration is from a specimen which was obtained at Panama, and appears to correspond closely with the description.

M. FORMICARIA, Sowb. Pl. 21, fig. 38.

Shell acuminately oblong, longitudinally strongly ribbed, interstices crossed with very fine striæ; pitch-black within and without. Length, 8 mill.

Iquiqui, Peru, under stones (Cuming).

I am not acquainted with the species above so meagrely described.

M. ORDINARIA, E. A. Smith. Pl. 34, fig. 97.

Shell subturreted, yellowish brown; ribs 10–11, with strong revolving striæ or liræ, here and there larger; lip thickened.

Length, 7·5 mill.

Chili and *Peru.*

This will probably prove identical with the last species. Figured from a specimen.

M. CARPENTERI, Folin. Pl. 30, fig. 74.

Fulvous. Length, 4·5 mill.

Pacific Ocean, on Meleagrina.

M. GODFROIDI, Folin. Pl. 30, fig. 70.

Very dark brown. Length, 4 mill.

Pacific Ocean, on Meleagrina.

M. LEUCOLABRATUM, Folin. Pl. 30, fig. 72.

Brown, the upper portion of the whorls light yellowish.

Length, 3·8 mill.

Pacific Ocean, on Meleagrina.

M. IMPERFECTUM, Folin. Pl. 28, fig. 43.

Reddish brown; sinus very shallow. Length, 4·2 mill.

Pacific Ocean, on Meleagrina.

M. SULCATA, Carpenter. Unfigured. Described from a single broken specimen, 2 inches long. *Mazatlan.*

Digitized by Google

M. CEREA, Carpenter. A single immature specimen described, but not figured. *Panama.*

M. LEVIDENSIS, Carpenter. *Puget Sound* and *Neah Bay.*

M. ALBOLAQUEATA, Carpenter. From an imperfect, worn specimen; lip broken. *Panama.*

M. HAMATA, Carpenter. Unfigured. *Panama.*

M. STELLATA, Mörch. Unfigured. *W. Coast Central America.*

M. UNDATICOSTATA, Reeve. Pl. 21, fig. 34.

Shell fusiform, whorls slightly shouldered, with longitudinal, waved ribs; whitish. Length, 9·5 mill.

Hab.? (Reeve); *Cape York*, *Australia*, and *N. Guinea* (Brazier).

M. CAVERNOSA, Reeve. Pl. 21, fig. 26.

Shell narrowly shouldered; ribs oblique, rather narrow; white, the shoulder light chestnut, with sometimes a few chestnut spots on the body-whorl. Length, 9–10 mill.

N. S. Wales (Cox); *Philippines* (Cuming).

M. FUNEBRIS, Reeve. Pl. 24, figs. 27, 18.

Shell smooth, the ribs rather solid, obtuse, with wider interspaces; yellowish brown, broad banded with chestnut, ribs lighter colored than the interstices. Length, 9–11 mill.

Philippines.

M. pusilla, Reeve (fig. 18), appears to be identical.

M. HEXAGONALIS, Reeve. Pl. 20, figs. 1, 4.

Shell with six distant longitudinal continuous ribs, and rather close revolving striæ; yellowish white. Length, 8 mill.

Philippines; N. Australia; N. Guinea.

The artificial and unnatural grouping of the Pleurotomidæ is well illustrated in this species, for *M. obeliscus*, Reeve (fig. 4), which has a toothed aperture, and would therefore belong to another section, is nevertheless specifically identical with *M. hexagonalis.*

M. GRACILENTA, Reeve. Pl. 23, figs. 98, 88; Pl. 17, fig. 11.

Shell yellowish white to yellowish brown, very slightly nar-

Digitized by Google

rowly shouldered, pretty closely longitudinally ribbed, the ribs subnodulous, crossed by elevated revolving striæ.

Length, 15 mill.

Philippines, Japan, N. Australia.

M. contracta, Reeve (Pl. 23, fig. 88), is a smaller specimen of the same species; as is also *M. Fusoides*, Reeve (Pl. 17, fig. 11).

M. FULVOCINCTA, Nevill. Pl. 22, fig. 52.

Whorls nine, the first four embryonal and colorless, the others varicosely seven-ribbed, with microscopic revolving striæ; whitish, chestnut banded below the sutures, and also at base of body-whorl, and within the aperture. Length, 8 mill.

India.

M. ZONATA, Reeve. Pl. 23, fig. 79.

Shell obscurely shouldered, longitudinally ribbed, ribs smooth, descending from the sutures; white, with a chestnut band at the upper part of the aperture. Length, 8 mill.

Philippines (Cuming); *Solomon Is.* (E. A. Smith).

M. ANGICOSTATA, Reeve. Pl. 23, fig. 85; Pl. 32, fig. 49; Pl. 22, fig. 69.

Shell turreted, whorls distinctly shouldered, with a few distant small longitudinal ribs, extending to the suture, and much wider interspaces; light yellowish brown to white; columella chocolate tinged, often with a narrow interrupted chocolate central line.

Length, 18 mill.

New Caledonia, Viti Isles.

Described without locality, but there can be little doubt that *M. melanostoma*, Garrett (fig. 49), from the Viti Isles, is identical, although Reeve does not mention the dark bordered columella. Probably Reeve's figure is magnified. *M. scalata*, Souverb. (Pl. 22, fig. 69), is a short variety, pure white with the narrow band, from New Caledonia. Some of Garrett's Viti Islands specimens are exactly like it.

M. CLARA, Reeve. Pl. 23, fig. 89.

Shell smooth, plicately ribbed, round shouldered; purple brown, upper part of the whorls whitish. Length, 15 mill.

Hab. unknown.

The aperture being neither described nor figured, the position of this species can only be guessed at.

Digitized by Google

M. CORNEA, Reeve. Pl. 23, fig. 99.

Shell ovate, spire acuminated, horny, semitransparent; finely longitudinally ribbed; light brown, encircled by a pale zone.

Length, 5 mill.

Hab. unknown.

M. LUTESCENS, Reeve. Pl. 23, fig. 88.

Whorls very narrowly obtusely shouldered; longitudinal ribs numerous, small, with revolving striæ in the interstices; yellowish brown. Length, 12 mill.

Hab. unknown.

Described by Reeve under the name of *M. fulva*, preoccupied by Hinds.

M. LIVIDA, Reeve. Pl. 23, fig. 80.

Whorls smooth, with narrow flexuous longitudinal ribs; livid flesh-color. Length, 12 mill.

Philippines, on the reefs (Cuming).

M. LINEATA, Reeve. Pl. 23, fig. 77.

Shell obtusely longitudinally ribbed, smooth; fleshy brown, with numerous faint revolving lines of darker color.

Length, 8 mill.

Hab. unknown (Reeve); *So. Australia* (Angas).

M. NITENS, Hinds. Pl. 20, fig. 2.

Whorls carinately shouldered; with longitudinal, sharp, oblique ribs, pointed on the shoulder-angle, and extending to the suture, and revolving striæ; flesh-brown. Length, 12 mill.

N. Australia, *New Guinea*, *Straits of Macassar*, and *Malacca*.

M. OPALUS, Reeve. Pl. 20, fig. 5.

Shell with continuous longitudinal distant ribs, the wide interstices smooth or with revolving striæ; whorls obtusely angulated in the middle; white, the interstices of the ribs sometimes more or less stained with brown. Length, 9 mill.

Philippines.

M. PYRAMIS, Hinds. Pl. 34, fig. 86.

Shell white, angularly longitudinally sharp ribbed, six-sided, with close revolving striæ. Length, 12 mill.

Straits of Macassar (Hinds).

Digitized by Google

M. PSEUDOCARINATA, Reeve. Pl. 20, fig. 3.

Whorls concavely shouldered, somewhat indistinctly keeled, the keel rendered nodulous by the ends of close obliquely longitudinal ribs, which are short, becoming evanescent about the middle of the body-whorl, everywhere with close revolving grooves, which are somewhat nodulous; yellowish brown.

Length, 9 mill.

Habitat unknown (Cuming Collection).

M. PURA, Reeve. Pl. 23, fig. 76.

Spire turreted; whorls slightly, narrowly shouldered; sutures rather deep; ribs narrow, reaching the sutures, revolving striæ distant; yellowish white, with a median row of faint brown spots on the back of the body-whorl. Length, 8 mill.

S. Australia (Angas).

M. PALLIDA, Reeve. Pl. 23, fig. 78.

Whorls convex, without shoulder, with about 10–11, strong, flexuous ribs extending to the suture; white. Length, 8 mill.

Isl. of Ticao, Philippines.

M. SORDIDA, Reeve. Pl. 20, fig. 98.

Whorls angulated in the middle; longitudinally obliquely ribbed, the ribs short, most prominent on the angle; interstices latticed with raised striæ—which become more prominent towards the base of the body-whorl, where the ribs are obsolete; dull white. Length, 6 mill.

Habitat unknown (Mus. Metcalfe).

M. SEMEN, Reeve. Pl. 23, fig. 86.

Whorls with rather broad, sloping shoulders, nodulated by the ends of short oblique longitudinal plicæ, or ribs; no revolving striæ; chestnut-brown, the ribs lighter or whitish.

Length, 6 mill.

St. Nicolas, Island of Zebu, Philippines, under stones at low-water (Cuming).

M. VITREA, Reeve. Pl. 23, fig. 95.

Shell cylindrically elongated, thin, pellucid, glassy, smooth; no longitudinal ribs; a few revolving grooves at the upper and lower part of the body-whorl, the former appearing on the spire also; yellowish white. Length, 6 mill.

Singapore, and *Philippines* (Cuming).

A species having peculiar characters.

Digitized by Google

M. CASTANEA, Reeve. Pl. 23, fig. 84.

Whorls rounded; longitudinally ribbed, the interstices with close revolving striæ; chestnut-brown. Length, 11 mill.

Isle of Burias, Philippines (Cuming).

Nearly related to *M. livida*, but the ribs are straighter, the canal more slopingly produced, and the surface striate.

M. ROBUSTICOSTATA, Smith. Pl. 22, fig. 60.

Whorls turreted, with strongly angular periphery, and short, oblique ribs, about twelve in number; lip thin at edge, but thickened externally by one of the ribs; sinus scarcely discernible; yellowish brown, whitish towards the base of the body-whorl and labrum. Length, 6·3 mill.

Japan.

M. SPLENDIDA, A. Adams. Pl. 22, fig. 55.

Shell somewhat thin, subpellucid, shining, with longitudinal, obtuse, unequal, rather weak plicæ, and somewhat distant spiral lineations; light brownish, with bands of rather large chestnut maculations; lip acute, but varicose externally.

Length, 1 inch.

Japan.

One of the largest and most distinct species of the group, though scarcely of typical character.

M. COPPINGERI, Smith. Pl. 22, fig. 58.

Whorls divided by a deep suture, longitudinally closely ribbed, the ribs becoming obsolete on the lower part of the body-whorl, where they are replaced by revolving striæ, more distinct towards the base; aperture small, labrum thickened, with a very faint sinus; chocolate-brown, including the aperture.

Length, 6·3 mill.

Patagonia.

M. COSTULATA, Dunker. Pl. 22, figs. 62, 70.

Shell with close, rounded, longitudinal ribs, and obsolete revolving striæ; yellowish white, with narrow chestnut revolving lines. Length, 8 mill.

Japan.

M. Leuckarti, Dunker (fig. 70), is a variety with stronger revolving striæ, and uniformly brown-colored.

Digitized by Google

M. DESHAYESII, Dunker. Pl. 22, fig. 71.

Narrowly shouldered, with close, small, longitudinal riblets, crossed by revolving elevated striæ; light yellowish brown, the thickened lip brown-spotted. Length, 7 mill.

Japan.

Very probably identical with the preceding species.

M. PICTA, Adams and Angas. Pl. 22, fig. 72.

Whorls with narrow shoulder; longitudinal ribs few, slightly flexuous, with much wider interspaces covered with revolving striæ; light yellowish brown, with a broad chocolate band beneath the shoulder. Length, 12 mill.

Port Jackson, Australia.

M. INSCULPTA, Adams and Angas. Pl. 22, fig. 61.

Closely longitudinally plicate, the ribs forming a slight posterior shoulder or angle, interstices with revolving liræ; light yellowish brown, darker in the grooves. Length, 6 mill.

St. Vincent's Gulf, So. Australia.

M. ANGULOSA, E. A. Smith. Pl. 22, fig. 67.

Whorls obtusely angulated, with six curved longitudinal ribs, and close small revolving striæ, distinct only in the interstices; light brown. Length, 5 mill.

West Africa.

M. FLAVESCENS, Angas. Pl. 22, fig. 68.

Whorls shouldered, the angle pointed with the longitudinal ribs; revolving striæ, closer and sharper at the base of the body-whorl; yellowish white, sometimes tinged with orange at the angle of the whorls and towards the base. Length, 5 mill.

Port Jackson, Australia.

M. PAPILLARIS, Hinds. Pl. 15, fig. 21.

Whorls angulated, obsoletely tubercularly ribbed; pinkish yellow, edge of the lip tinged with red within. Length, 11 mill.

Straits of Malacca, 17 fathoms, mud (Hinds).

A very obscure species, the characters of which are not apparent.

M. DARNLEYENSIS, Brazier. Pl. 19, fig. 73.

Shell pyramidal, slender, six-sided, longitudinally ribbed, crossed with raised striæ, somewhat rugose, interstices smooth;

Digitized by Google

whorls 7 to 8, flattened; outer lip slightly varicose, sinus wide and deep; yellowish brown, lip sometimes black-edged.

Length, 12 mill.

Torres Straits, Australia.

Figured from one of several specimens obligingly communicated by Mr. Brazier.

M. CITHARELLA, Lam. Pl. 24, figs. 13, 14.

Light yellowish brown, or yellowish white, banded narrowly and numerously with chestnut. Length, 15–20 mill.

Solomon's Is., Philippines.

This is *M. striata*, Schum. *M. lyra*, Reeve (fig. 14), is a variety with stronger shoulder-angle and ribs. Mr. E. A. Smith considers *M. funiculata*, Reeve, a variety also; but that species has a toothed labrum, and therefore belongs to the section Cythara, as very artificially separated from Mangilia; it may be a synonym, nevertheless.

M. PYGMÆA, Dunker. Pl. 32, fig. 50.

Longitudinally plicate, plicæ evanescent towards the base of the body-whorl; light brown. Length, 6 mill.

Japan.

M. VARICULOSA, Sowb. Pl. 16, fig. 60.

Whorls narrowly shouldered; longitudinal ribs granose, crossed by raised striæ; dark chocolate-brown.

Length, 13·5 mill.

Bay of Montija, W. Coast Centr. America.

M. QUISQUALIS, Hinds. Pl. 16, fig. 63.

White, obtusely angulated, smooth above the angle, which is nodose by the termination of short longitudinal ribs.

Length, 11 mill.

W. Coast Centr. America.

M. LUCIDA, Nevill. Pl. 12, fig. 19.

White, slightly and irregularly marbled with pale brown, between the ribs and especially behind the outer lip.

Length, 8 mill.

Persian Gulf; Bay of Bengal.

Allied in general to *M. quisqualis*, Hinds, but is smaller, with transverse striæ at the base of the last whorl, with a row of

Digitized by Google

granules and a deep groove beneath the suture, and with straight instead of oblique ribs. Perhaps a Drillia.

M. ERICEA, Hinds. Pl. 16, fig. 71.

Light brown; slightly shouldered, the ribs continued to the sutures, nodulous below the shoulder, by the crossing of revolving lines. Length, 12·5 mill.

Coast of Veragua.

M. CÆLATA, Hinds. Pl. 16, fig. 67.

Whorls shouldered, with an elevated revolving line below the suture, shortly obliquely ribbed below the shoulder; dark chestnut, aperture blackish. Length, 6·5 mill.

Gulf of Fonseca, mud, 20 fms. (Hinds).

M. CONCENTRICOSTATA, Reeve. Pl. 15, fig. 48.

Shell slenderly fusiform, spire acuminated, whorls very closely concentrically ribbed, sutures simple; flesh-tinged brown.

Length, 12 mill.

Habitat unknown.

Closely allied to *M. variculosa*, Sowb., but without the raised revolving striæ of that species.

M. MARGARITIFERA, Gray. Pl. 15, figs. 39, 43.

Whorls rounded or very slightly shouldered, reticulated by longitudinal and revolving fine ribs and lines; yellowish brown, tinged with chestnut, sometimes forming an indistinct central band. Length, 7 mill.

Habitat unknown.

With this species I unite *M. dædala*, Reeve (fig. 43), also described without locality, but for which Mr. Brazier indicates Torres Straits, N. Australia.

M. CARDINALIS, Reeve. Pl. 15, fig. 44.

Obliquely longitudinally plicated, minutely transversely striated; yellowish white, with three narrow chocolate bands.

Length, 10 mill.

Isle of Negros, Philippines.

M. CRASSILABRUM, Reeve. Pl. 15, figs. 45, 47.

Shell narrowly shouldered, the shoulder smooth, tubercularly

Digitized by Google

ribbed beneath, crossed by elevated revolving striæ; yellowish brown, variously chocolate banded. Length, 16 mill.

Isl. Ticao, Philippines; Darnley Isl., N. Australia (Brazier), *Bay of Hakodadi* (Schrenck).

A variety of this species is entirely without the colored bands.

M. ALBICANS, Hinds. Pl. 16, fig. 57.

Slightly longitudinally ribbed, the ribs nodose at the sutures, with revolving striæ towards the base of the body-whorl; whitish, more or less tinged with chestnut. Length, 6 mill.

Straits of Malacca; mud, 17 fms. (Hinds).

M. ANGULATA, Reeve. Pl. 24, fig. 28.

Whorls sharply angulated, with a few sharp narrow longitudinal ribs, crossing the shoulder to the suture, no revolving striæ; yellowish brown, lineated with pale chestnut.

Length, 5 mill.

Bay of Manilla (Cuming); *Cape York, Australia* (Brazier).

M. CINCTA, Reeve. Pl. 24, fig. 29; Pl. 27, fig. 13.

Rather narrowly shouldered, the shoulder-angle sharp pointed by the ribs, which attain the suture, interstices of the ribs with revolving striæ; yellowish brown, with a broad superior darker band. Length, 7·5 mill

Philippines.

I unite with this species *M. nana*, Reeve (Pl. 27, fig. 13), which is not banded. There is not sufficient distinction between this and the preceding species.

M. ORYZA, Hinds. Pl. 23, fig. 94.

Shell smooth, shining, with seven prominent plicate ribs; whitish. Length, 12 mill.

New Guinea.

M. MACULATA, Reeve. Pl. 26, fig. 72.

White, with an orange-brown band, interrupted by the ribs, and appearing only in the interstices. Length, 10 mill.

Darnley Isl., N. Australia (Brazier); *Philippines* (Cuming).

Digitized by Google

M. TENEBROSA, Reeve. Pl. 26, fig. 70.

Shell turreted, with narrowly, flatly shouldered whorls and deep sutures; distantly longitudinally ribbed, crossed by revolving striæ; dark chestnut-brown without and within.

Length, 10 mill.

Philippines.

M. ABYSSICOLA, Reeve. Pl. 24, fig. 19.

Whorls shouldered, the narrow, rather distant longitudinal ribs crossing the acute angle of the shoulder to the suture, encircled by raised striæ; yellowish brown, with a narrow chestnut central band. Length, 7–10 mill.

Philippines.

M. ASTRICTA, Reeve. Pl. 24, fig. 26.

Whorls convex, without shoulder; longitudinally rather numerously but narrowly ribbed; yellowish, with a narrow interrupted central chestnut band, and a still narrower superior one.

Length, 11 mill.

Habitat unknown.

M. GOODALLII, Gray. Pl. 27, fig. 7.

Whorls with narrow sloping shoulder; conspicuously narrowly ribbed, with wider concave interspaces bearing revolving striæ; whitish or yellowish, the striæ pale brown. Length, 10 mill.

Hab. unknown (Reeve); *N. Australia* (Brazier).

M. PESSULATA, Reeve. Pl. 26, fig. 66.

Whorls not shouldered, rather flat: rather numerously flexuously longitudinally ribbed, the interstices with revolving striæ; whitish. Length, 11 mill.

Philippines.

M. CORONATA, Hinds. Pl. 27, fig. 19.

Whorls six, shouldered; plicately ribbed and transversely striated, ribs somewhat acuminated at the upper part; yellowish white. Length, 12 mill.

Straits of Macassar (Hinds).

M. CELEBENSIS, Hinds. Pl. 27, fig. 12.

Shell smooth, plicately ribbed, ribs rather distant; light yellowish, brown banded. Length, 12 mill.

New Guinea.

Digitized by Google

M. PYRAMIDALIS, Reeve. Pl. 23, fig. 93.

Shell pyramidal, slim, whorls with sloping shoulders, with narrow ribs reaching the sutures, and much wider interspaces, which are transversely striated; yellowish white.

Length, 7 mill.

Philippines.

Unfigured Exotic Species of Mangilia.

M. MODICA, E. A. Smith. *Japan.*

M. FLEXUOSA, M. MINUTISTRIATA, M. OPALINA, M. PLATYCHEILA, M. ACUTANGULARIS, of E. A. Smith. *No locality.*

M. PELLYI, E. A. Smith. *Persian Gulf.*

M. CALEDONICA, E. A. Smith. *New Caledonia.*

M. TRIZONATA, E. A. Smith. *Philippines.*

M. FILICINCTA, E. A. Smith. *Japan.*

M. LEVUKENSIS, Watson. *Fiji Islands.*

M. TRACHYS, Tenison-Woods. *Tasmania.*

M. MEREDITHIÆ, Tenison-Woods. *Bass Straits, Tasmania.*

M. SEMIASSA, Gould. *Hab. unknown.*

M. TETRAGONA, Gould. *China Sea.*

M. LUTEA, Gould. *Loochoo Sea.*

? M. MICA, Philippi. *Red Sea.*

M. CRASSICOSTATA, Dunker. *Viti Isles.*

M. CLAVATA, Sowerby. *China Sea.*

M. ANNA, Jousseaume. *N. Caledonia.*

Section CYTHARA, Schumacher.

M. MARGINELLOIDES, Reeve. Pl. 24, figs. 22, 17.

Interstices of the longitudinal ribs either smooth or more or less thickly covered with fine revolving striæ; yellowish or ash-white, with fine, rather close chestnut revolving lines, sometimes interrupted by the ribs, sometimes crossing them, sometimes obsolete, shoulder usually tinged with chocolate.

Length, 10–13 mill.

Philippines, New Guinea, New Caledonia.

M. Columbelloides, Reeve (fig. 17), is a synonym.

M. ANTILLARUM, Reeve. Pl. 24, fig, 12.

Shell ribbed, without revolving striæ; yellowish brown, broadly

Digitized by Google

banded with chocolate and shoulder tinged with the same color.

Length, 16 mill.

West Indies (Reeve).

The locality may be doubted, as it has not been confirmed by any other authorities; its distinctness from the preceding species is also doubtful.

M. RETICULATA, Reeve. Pl. 24, fig. 10; Pl. 25, figs. 45, 47.

Longitudinally plicately ribbed, finely transversely striated; yellowish, broadly two-banded with chocolate or bluish ash, the two bands sometimes coalescing into one and covering all except the upper portion of the body-whorl. Length, 9–12 mill.

Philippines, *N. Caledonia*, *Solomon's Is.*, *Viti Isles.*

M. Guestieri, Souverb. (Pl. 25, fig. 47), is a synonym, and *M. Richardi*, Crosse (Pl. 25, fig. 45), appears to be a small form, without bands.

M. OBESA, Reeve. Pl. 26, fig. 71.

Interstices of the ribs with strong revolving striæ; whitish, the shoulder and base of the body-whorl tinged with chocolate, with a central rather broad band of the same color.

Length, 10 mill.

Philippines.

Perhaps a variety of the preceding species. Described under the name of *vittata*, preoccupied by Hinds.

M. PONDEROSA, Reeve. Pl. 23, fig. 5.

Numerously narrowly and delicately longitudinally ribbed, latticed by revolving striæ; yellowish white, interruptedly narrowly brown-banded at the slight shoulder, and occasionally tinged with brown elsewhere. Length, 16 mill.

Philippines (Cuming); *N. Australia* (Brazier).

M. CONOHELICOIDES, Reeve. Pl. 23, fig. 4.

Longitudinally many ridged, transversely striate; yellowish white, with sometimes a large orange-brown blotch on the back of the body-whorl. Length. 12 mill.

Philippines, under stones (Cuming).

M. GRADATA, Nevill. Pl. 25, fig. 44.

Ribs narrow, straight, continuing to the base of the body-whorl, interstices regularly transversely striated; columella

Digitized by Google

almost straight, slightly rugose above, outer lip nearly straight, very thick, regularly rounded; pure white. Length, 5·75 mill.

Ceylon, *Bombay*.

Possibly a form of the preceding species.

M. PLANILABROIDES, Tryon. Pl. 21, fig. 28.

Shell fusiform, smooth, narrowly, slopingly shouldered; brown with a superior white zone. Length, 10 mill.

Isl. of Ticao, *Philippines* (Cuming).

Described by Reeve as *M. planilabrum*, a name already used by him for the following species described as a Pleurotoma.

M. PLANILABRUM, Reeve. Pl. 23, fig. 87.

Shell ovately oblong, reddish brown; whorls convex, lineated spirally, ribbed longitudinally, ribs almost obsolete; aperture oblong, lip flat, red, denticulated within, canal very short.

Length, 1 inch.

Philippines (Cuming).

M. DECUSSATA, Pease. Pl. 25, fig. 37.

Whorls shouldered; longitudinally narrowly ribbed, the broader interspaces with revolving striæ; white. Length, 10 mill.

Paumotus Is.

M. CITHARA, Gould. Pl. 25, fig. 43; Pl. 22, fig. 50.

Ribs rounded, prominent, the interspaces narrow, with close revolving striæ; white, sometimes obscurely chestnut-banded.

Length, 8–10 mill.

Fiji Is. (Gould); *Paumotus Is.* (Pease).

Mr. Pease's *M. brevis* (Pl. 22, fig. 50) appears to be a synonym; the type, which is before me, is a specimen not fully grown.

M. CAPILLACEA, Reeve. Pl. 26, fig. 73.

Whorls lightly shouldered; ribs narrow, flexuous, the interspaces broader, with revolving striæ; light yellowish brown, encircled by hair-like brown lines on the summits of the striæ.

Length, 11 mill.

Philippines (Cuming); *Solomon Is.* (E. A. Smith);

N. Australia (Brazier).

M. DELACOURIANA, Crosse. Pl. 25, fig. 32.

Ribs rounded, narrower than the interspaces, surmounting the

Digitized by Google

slight shoulder-angle and attaining the suture, revolving striæ very fine and close; white, with traces of brown staining.

Length, 12 mill.

N. Caledonia.

Is possibly a variety of the preceding species, from which it appears to differ only in the absence of the hair-like brown lines.

M. STROMBOIDES, Reeve. Pl. 23, fig. 1.

Interstices of the ribs with fine revolving striæ; yellowish white. Length, 14 mill.

Philippines (Cuming), *Red Sea* (Rüppell).

M. ELEGANS, Reeve. Pl. 23, fig. 3.

Interstices of the narrow ribs very beautifully elevately striated; yellowish white, very faintly zoned with brown.

Length, 13 mill.

Philippines (Cuming).

Perhaps a variety of the preceding species.

M. BALANSAI, Crosse. Pl. 25, fig. 35.

Yellowish white, the interstices of the ribs chestnut-colored, obsoletely chestnut-banded. Length. 19·5 mill.

New Caledonia.

Narrower and more numerously ribbed than *M. Stromboides*, Reeve.

M. DUBIOSA, Nevill. Pl. 25, fig. 42.

Doubtfully distinct from the next species, which is described and figured from a young shell. White, with a broad brown stain on the back of the last whorl; ribs narrow, straight, not on the shoulder, interstices closely striated. Length, 7·5 mill.

Andaman Is.; Mauritius.

M. CONIFORMIS, Gray. Pl. 26, fig. 79.

Shell rather transparent, thin, whitish; faintly plicate on the upper part of the whorls, transversely very faintly striated.

Length, 9 mill.

Habitat unknown (Reeve); *W. Coast of Cent. Am.* (Mörch).

M. SOUVERBIEI, Tryon. Pl. 22, fig. 65.

Shell minutely tuberculate at the shoulder-angle, and covered

Digitized by Google

by minute revolving striæ; whitish, with a large dorsal brownish spot or stain. Length, 7 mill.

New Caledonia.

Described by Souverbie as *M. coniformis*, a name preoccupied by Gray, above.

M. PULCHELLA, Reeve. Pl. 24, fig. 20.

Many ribbed, the ribs flexuous, narrow, the interstices very faintly reticulated; yellowish white, with several narrow chestnut bands interrupted by the ribs. Length, 12 mill.

Isle of Ticao, Philippines, on the sands (Cuming).

M. VEXILLUM, Reeve. Pl. 24, fig. 8.

Whorls nodulous at the shoulder, with ribs descending from the nodules, entire surface of the shell decussately striated, as if very finely granulated; orange-yellow, with a number of narrow whitish bands. Length, 11 mill.

Philippines, under stones (Cuming).

M. LAMELLATA, Reeve. Pl. 26, fig. 69.

Sutures deep, a little cavernous, ribs narrow, erect, lamelliform, somewhat pointed around the sutures, transversely strongly distantly striate; yellowish white, faintly zoned with pale brown. Length, 11 mill.

Philippines, coarse sand, 7 fathoms (Cuming).

M. REEVEI, Tryon. Pl. 26, fig. 68.

Longitudinally plicately ribbed; ribs crossing the shoulder to the suture; yellowish white or light brown, banded with pale chocolate, crossed with numerous obscure fine white lines. Length, 11 mill.

Philippines (Cuming).

Described by Reeve as *Mangilia crassilabrum*, but the specific name is preoccupied by himself in *Pleur. crassilabrum*, which is also a Mangilia.

M. INTERRUPTA, Reeve. Pl. 23, figs. 74, 75; Pl. 22, fig. 51.

Shell nodose at the shoulder, with strong, narrow, rounded ribs descending from the nodules; whitish, with hair-like, chocolate, revolving lines between the ribs, sometimes approximating into bands. Length, 7 mill.

Philippines, Sandwich Isl., Mauritius, Abyssinia, Ceylon.

Digitized by Google

Daphnella bella, Pease (unfigured), and *Pl. gemmulata*, Desh. (Pl. 22, fig. 51), are synonyms.

M. GIBBOSA, Reeve. Pl. 24, figs. 24, 25.

Whorls nodulous at the shoulder, smooth, ribs slightly flexuous; ashy white, encircled by faint orange-brown lines, back stained with pale black at the upper part. Length, 7 mill.

Philippines, on the reefs (Cuming); *Swan River*, *Australia*.

M. Novæ-Hollandiæ, Reeve (fig. 25), appears to be only a variation of the main characters of this shell.

M. CINNAMOMEA, Hinds. Pl. 27, fig. 17.

Shouldered, plicately ribbed, transversely obsoletely striated; cinnamon-colored, narrowly white-banded. Length, 13 mill.

New Guinea, *Straits of Macassar*, and *Malacca*.

M. PELLUCIDA, Reeve. Pl. 24, fig. 31; Pl. 22, fig. 63.

Shell ovate, attenuated at both ends, smooth, transparent, shining, longitudinally closely ribbed, whitish, brown at the base, sometimes with three narrow, interrupted bands.

Length, 5 mill.

Habitat unknown (Reeve); *Darnley Isl.*, *Australia* (Brazier); *Philippines* (Ad. and Reeve).

M. trivittata, Ad. and Reeve (Pl. 22, fig. 63), appears to be a banded form of this species.

M. DERELICTA, Reeve. Pl. 24, fig. 30; Pl. 23, fig. 96.

Longitudinally strongly ribbed, transversely obsoletely striated; light brown. Length, 7 mill.

Habitat unknown.

"A strong ribbed species of ordinary form," says Reeve. I do not find any sufficiently distinctive characters in either the description or figure of *M. Zebuensis*, Reeve (Pl. 23, fig. 96), from the Philippines.

M. APICATA, Gray. Pl. 15, fig. 32.

Whorls concavely flattened above a fine keel, nodosely plaited beneath, plaits fading away towards the lower part; transversely impressly striated; pale yellow, reddish at the apex.

Length, 7 mill.

Habitat unknown.

Digitized by Google

M. NEGLECTA, Hinds. Pl. 15, fig. 35.

Ribs rounded, approximated, transversely elevately striated; rusty brown. Length, 10 mill.

Gulf of Nicoya, W. Coast of Central America.

Is quite as nearly related to Clathurella as to Cithara.

M. ANGELA, Ad. and Angas. Pl. 25, fig. 34.

Yellowish white, chocolate-tinted towards the base, aperture stained with violet in front. Length, 15 mill.

Woodlark Isl., Australia.

M. FUNICULATA, Reeve. Pl. 24, fig. 16.

Smooth, ashy brown, the ribs whitish. Length, 16 mill.

Philippines.

Mr. E. A. Smith (Jour. Linn. Soc., xii, 538), considers this a synonym of *M. citharella*, Lam. This may indeed be the case, but if so, we can retain but few of the numerous species of Mangilia. It is narrower than that species, and the outer lip is toothed, thus placing it in Cythara, whilst *M. citharella*, having a plain lip, is a typical Mangilia.

M. DORVILLIÆ, Gray. Pl. 16, fig. 65.

Shell rather thin, narrowly shouldered; longitudinally plicated, with fine revolving striæ, more conspicuous towards the base; whitish, with a pale brown three-line zone. Length, 9 mill.

West Indies.

M. GRACILIS, Reeve. Pl. 24, fig. 15.

Ribs narrow, distant, the interstices with very fine revolving striæ; whitish, with a central chestnut zone, and sometimes additional chestnut blotches. Length, 13 mill.

Philippines (Cuming); *Viti Islands* (Garrett).

M. CYLINDRICA, Reeve. Pl. 23, fig. 92; Pl. 24, fig. 9.

Slightly shouldered, longitudinally finely ribbed, the ribs attaining the suture, transversely elevately striated; transparent white, stained with pale brown, spotted on the shoulder with orange-brown. Length, 10 mill.

Philippines, sandy mud, 25 fms. (Cuming).

Digitized by Google

M. FUSIFORMIS, Reeve. Pl. 23, fig. 2.

Yellowish white, stained or interruptedly fasciated with orange-brown. Length, 15 mill.

Philippines, coarse sand, 10 fms. (Cuming).

M. LYRICA, Reeve. Pl. 24, fig. 21.

Whorls not shouldered; lightly longitudinally ribbed, crossed by revolving elevated striæ; light brown, indistinctly banded with orange-brown. Length, 11 mill.

Philippines.

Lightly ribbed, and more attenuated towards the base than the allied forms.

M. TURRICULA, Reeve. Pl. 24, fig. 23.

Sutures deep; shoulder very narrow; whorls rather flat; whitish, sometimes with a central brown band, with fine brown revolving lines, invisible except with a lens. Length, 12 mill.

Philippines, *Mauritius.*

M. BICOLOR, Reeve. Pl. 26, fig. 65.

Interstices of the ribs very finely transversely striated; whitish above, but most of the body-whorl lead-color.

Length, 11 mill.

Darnley Isl., *N. Australia* (Brazier);

Philippines (Cuming).

The coloring has probably faded from chocolate.

M. DIGITALIS, Reeve. Pl. 27, fig. 24.

Shell solid, granosely cancellated, yellowish white, with narrow brown sutural and peripheral bands. Length, 7 mill.

Hab. unknown (Reeve); *Solomon Is.* (E. A. Smith).

M. TRITICEA, Kiener. Pl. 25, fig. 51; Pl. 27, fig. 14.

Longitudinal ribs oblique, transverse striæ very fine but distinct, inner and outer lips both corrugated; whitish, with a broad central brown band on the back of the body-whorl, which when the shell is worn appears as a spot. Length, 10 mill.

Indian Ocean (Kiener); *Polynesia* (Pease).

Pease changed *M. triticea*, Reeve, to *angiostoma*, believing the species distinct from the Indian Ocean form described and figured under the name of *triticea* by Kiener. I cannot detect distinguishing characters, however; moreover Kiener's locality

Digitized by Google

may not be true, although if so, it would not make an extraordinary distribution for the species.

M. FASCIATA, Gray. Pl. 26, fig. 74.

Ribs latticed with conspicuous transverse striæ; yellowish white, with a central, narrow, chestnut band. Length, 8·5 mill.

Africa.

I know nothing concerning this species.

M. VITTATA, Hinds. Pl. 22, fig. 66.

Closely ribbed, crossed by numerous revolving striæ; yellowish brown, fasciate with chestnut. Length, 11 mill.

Straits of Macassar, 10 fms., coarse sand (Hinds).

M. EXQUISITA, E. A. Smith. Pl. 24, fig. 6.

Narrowly and distantly longitudinally ribbed, transversely very finely corded; whitish, lineated and banded with chestnut. Length, 16 mill.

Philippines (Cuming); *Warrior I.*, *Australia* (Brazier).

This species was figured by Reeve for a specimen in the Cumingian collection, under the name of *vittata*, Hinds (described above), but it is evidently a different species.

M. METULA, Hinds. Pl. 16, fig. 59.

Whorls flattened, five in number; obsoletely ribbed, transversely striated, suture with a raised line; lip inflected in the middle; yellowish brown, banded with chestnut.

Length, 6 mill.

Habitat unknown.

M. RIGIDA, Hinds. Pl. 16, fig. 64.

Shoulder undulated at the angle by the longitudinal ribs, which are crossed by raised striæ; fulvous. Length, 8 mill.

Panama.

Partakes of the characters of Clathurella. Carpenter has described (but not figured) a var. *fuscoligata*, from Cape St. Lucas, L. California. I have not seen it.

M. ASPERA, Hinds. Pl. 16, fig. 62.

Shoulder very narrow, longitudinal ribs decussated by raised revolving lines; chocolate-brown, aperture flesh-red.

Length, 13 mill.

Guayaquil (Hinds).

Digitized by Google

M. SUBULA, Reeve. Pl. 20, fig. 94.

Closely reticulated with longitudinal and revolving lines, with a flatly obtuse keel near the suture, lip-sinus distinct; yellowish white, painted with chestnut spots around the suture.

Length, 15 mill.

Philippines, coarse sand, 7 fms. (Cuming);
Darnley I., *Australia* (Brazier).

M. FAIRBANKI, Nevill. Pl. 22, fig. 48.

Ribs rounded, distant, continuous, crossed by distant revolving riblets which swell upon the ribs; leaden brown, stained with a darker shade on the outer lip and columella. Length, 6 mill.

Bombay; probably also *Ceylon*, and *Andaman Is.*

Closely allied to *M. hexagonalis*, Reeve, but differs in the dentate aperture, shorter and more open canal, more distant and distinct revolving sculpture.

M. DEBILIS, Pease. Pl. 25, fig. 33.

Narrowly angulated at the suture, from which descend about ten longitudinal ribs, closely and finely crossed by revolving striæ; white, back of body-whorl stained with chestnut.

Length, 6 mill.

Paumotus Is.

Described as *Cythara dædalea*, which name being preoccupied, was subsequently changed as above.

M. HIRSUTUM, Folin. Pl. 30, fig. 75.

Yellowish white, the earlier whorls darker. Length, 3·4 mill.

Pacific Ocean, on Meleagrina.

M. BOAKEI, Nevill. Pl. 33, fig. 71; Pl. 25, fig. 36.

Whorls narrowly round-shouldered at the top; longitudinal plicæ close, small, rather straight; no revolving striæ; pinkish white, shining, with a subsutural interrupted chestnut band, and another about the top of the aperture, lower half of body-whorl pale chestnut; interior two-banded with chestnut; lip thickened, internally minutely crenulated. Length, 12 mill.

Ceylon, So. Australia.

I think that *M. bicinctula*, Nevill (fig. 71), will prove to be identical, and *M. bella*, Ad. and Angas (Pl. 25, fig. 36), from Rapid Bay, So. Australia, may also be considered a synonym.

Digitized by Google

Unfigured species of Mangilia of the Section Cythara.

M. INTAMINATA, Gould (*China Seas*); M. GLAREOSA, Gould (*Hong Kong*; M. ALBICINCTA, Gould (*Loo Choo Seas*); M. LOTA Gould (*China Seas*). All collected by Stimpson, N. Pac. Expl. Exped., and types destroyed in the great Chicago fire.

M. LABECULA, Gould. Dredged off the *Coast of Georgia*. May belong to Astyris, in Columbellidæ.

M. LANCEOLATA, C. B. Adams. *Jamaica.*

M. CORONATA, Mighels (*Sandwich Islands*). Pease thinks this may possibly = *M. triticea*, Reeve.

M. PAUCICOSTATA, Pease (*Tahiti*); M. PUSILLA, Pease (*Sandwich Islands*); M. STRIGATA, Pease (*Sandwich Islands*).

M. DESALESI and M. TASMANICA, Tenison-Woods. *Tasmania.*

M. MACCOYI, Petterd. (Allied to *M Tasmanica.*) *Tasmania.*

M. SUBTILIS, Watson. *Off Pernambuco.*

M. HANLEYI, Dunker. *Upolu.*

M. MILIUM, Philippi. *China.*

M. SINUATA, Carp. (*Panama*); M. SUBDIAPHANA, Carp., and M. FUSCONOTATA, Carp. (*Cape St. Lucas*).

Section GLYPHOSTOMA, Gabb.

Lienardia, Jousseaume (1884), of which the following species is made the type, is a synonym of Glyphostoma.

M. RUBIDA, Hinds. Pl. 15, fig. 34; Pl. 16, fig. 53; Pl. 18, fig. 51.

Pink outside and inside, the canaliculate sutures often black-banded, with frequently a white central band on the body-whorl, and a narrow black band below it. Length, 12 mill.

New Guinea, New Ireland, Mauritius, Viti and Cook's Is., New Caledonia.

Kiener has apparently figured this species for Donovan's *Murex angulatus*, of the British Channel. The synonymy also includes *M. canaliculata*, Pease (Pl. 18, fig. 51) = *M. Peasei*, Nevill, *M. Bertiniana*, Tapparone-Canefri (Pl. 16, fig. 53), and probably *M. exquisita*, Nevill. *M. Peasei*, was proposed instead of *canaliculata*, Pease, preoccupied by Reeve.

Digitized by Google

M. ROSEOTINCTA, Montrouzier. Pl. 16, fig. 54.

Shell larger than the preceding species, more attenuated towards the base, spire longer, outer lip not so thick; rose-colored. Length, 19 mill.

New Caledonia.

Perhaps only a variety of *M. rubida.*

M. MARMOROSA, Reeve. Pl. 27, fig. 11.

White, very sparingly spotted with orange-brown.

Length, 11 mill.

Habitat unknown.

M. ISSELI, G. and H. Nevill. Pl. 25, figs. 40, 48.

White, with two narrow, interrupted orange bands, one of which reappears on the spire. Length (decollated), 7·75 mill.

Ceylon.

Var. *Cernica* (fig. 48), from Mauritius, is smaller (6·5 mill.), and retains the embryonal whorls.

M. BICLATHRATA, Souverbie. Pl. 25, fig. 53.

Yellowish white, with a sutural chestnut band, and two bands below it on the body-whorl; both lips plicate. Length, 2·5 mill.

New Caledonia.

M. INTERSTRIATA, E. A. Smith. Pl. 25, fig. 50.

Longitudinal ribs ten, thin, oblique, with revolving lines in the interspaces; both lips denticulate; whitish, banded with dark chocolate at the sutures, and also at the middle and base of the body-whorl. Length, 8 mill.

San Christoval, Solomon Islands.

"This species has much resemblance to *Pl. biclathrata*, Souv., and may eventually prove to be but a large variety of it."

M. ONAGER, Souverbie. Pl. 25, fig. 46.

Whitish, with chestnut stripes and bands. Length, 15 mill.

New Caledonia.

M. UNILINEATA, E. A. Smith. Pl. 25, fig. 52.

Longitudinally ribbed and transversely striate; both lips denticulate; yellowish white or light brown, with an interrupted white median band margined below with chestnut.

Length, 15 mill.

San Christoval, Solomon Islands.

Digitized by Google

M. AMABILIS, G. and H. Nevill. Pl. 30, fig. 76.

White, with three double rows of bright brown granules on the ribs of the body-whorl, and one double row on those of the spire. Length, 7 mill.

Mauritius.

M. APICULATA, Montrouzier. Pl. 19, fig. 50.

Translucent white, with a row of opaque white spots about the middle of the body-whorl. Length, 7 mill.

New Caledonia (Montr.); *Ceylon and Andaman Is.* (Nevill).

M. SPURCA, Hinds. Pl. 15, fig. 37.

Yellowish brown, the revolving striæ dark brown. Length, 22 mill.

New Guinea and *Straits of Malacca* (Hinds); *Australia* (Brazier, Angas).

M. CINEREA, Hinds. Pl. 15, fig. 38.

Yellowish brown; the space above the tuberculated angle smooth. Length, 17 mill.

Hab. unknown.

May be only a form of the preceding species.

M. CANDIDA, Hinds. Pl. 15, fig. 41.

Ribs rather broad, rounded, the revolving striæ only at the base; white. Length, 14 mill.

Magnetic Island, Coast of Veragua (Hinds).

M. ARGILLACEA, Hinds. Pl. 15, fig. 40.

Brownish yellow; body-whorl with revolving striæ towards the base. Length, 14 mill.

Straits of Malacca, mud, 14 fms. (Hinds); *Darnley Isl., Australia* (Brazier).

I cannot detect any difference between the figure of this species and that of *M. candida*, and I suspect that, notwithstanding the very different localities, they are identical.

M. MONTROUZIERI, Souverbie. Pl. 20, fig. 77.

Orange-brown. Length, 26·5 mill. *New Caledonia.*

The largest species of the section.

M. OBESA, Garrett. Pl. 19, fig. 64.

Yellowish brown. Length, 9 mill. *Viti Islands.*

The type figured is evidently not adult.

Digitized by Google

M. ALBOVIRGULATA, Souverbie. Pl. 16, fig. 58.

The rounded ribs crossed by narrow revolving ridges; outer lip dentate within, inner lip with several oblique grooves; light lilac, with white blotches below the sutures, the spiral sculpture also whitish. Length, 14 mill.

New Caledonia.

Unfigured Species of Glyphostoma.

M. SOROR (*Persian Gulf*); M. BISERIATA (*Hab.?*); M. OBTUSICOSTATA (*?Japan, Persian Gulf*); M. RUBROCINCTA (*Fiji Islands*); M. BATHYRAPHE (*Philippines*);—all of Mr. E. A. Smith.

M. OCELLATA, Jousseaume. *Mauritius.*

Section CITHAROPSIS, A. Adams.

M. CANCELLATA, A. Adams.

Acuminated above and below, reddish brown, spire and aperture equal; whorls convex; longitudinally costellate, transversely lirate, closely elegantly cancellate, last whorl produced and acuminated below. *Japan.*

Unfigured. No dimensions given.

M. SOLIDA, Reeve. Pl. 27, fig. 10.

Solid, very closely granosely latticed throughout; purplish. Length, 9 mill.

Philippines, sand, 7 fms. (Cuming).

Genus CLATHURELLA, Carpenter.

C. INFLATA, Crist. et Jan. Pl. 32, fig. 30.

Whorls very convex, with very narrow, curved, distant ribs and close fine revolving striæ; yellowish brown.

Length, 1 inch.

Mediterranean Sea (rare in living state).

C. volutella, Kiener (figured) is a synonym.

C. STRIA, Calcara. Pl. 33, fig. 74,

Whorls convex, with revolving lines, those of the spire only with longitudinal rounded ribs. Length, 13 mill.

Mediterranean Sea.

Described as a fossil, but a few recent fragments have been dredged. *C. semiplicata*, Bonelli, is a synonym.

Digitized by Google

C. TORQUATA, Philippi. Pl. 20, fig. 78.

Rather thin, subdecussate, whorls with sloping shoulders, the angle set with small tubercles. Length, 1 inch.

Mediterranean, deep sea.

Originally described as a fossil from Calabria, but recent specimens have been dredged at several localities. It is *Pl. recondita*, Tiberi.

C. PURPUREA, Montagu. Pl. 18, figs. 40, 41.

Whorls usually well rounded, clathrate by narrow ribs and almost equally strong revolving ridges; reddish or purplish brown, white-zoned below the middle of the body-whorl, the zone distinct within the lip. Length, 12–19 mill.

Europe, Canary Islands.

Var. PHILBERTI, Mich. (fig. 41). Shell dwarf, more solid, fewer ribs, often particolored (*P. bicolor*, Risso).

Var. LA VIÆ, Phil. More lengthened and smaller than the type, very regularly trellised. It is the var. *oblonga* of Jeffreys and *P. corbis*, Michaud.

Var. MAJOR, Monts. Length, 26 mill.

Var. ATRA, Monts. Uniform dark chocolate.

Var. FLAVIDA, Monts. Light yellowish, a little roseate.

Var. ALBIDA, Bucq., Dautz. et Dollf. White.

Var. BICOLOR, Risso. Brown with large white spots.

Var. LINEOLATA, Bucq., Dautz. et Dollf. A brown line between each ridge.

C. CORDIERI, Payr. Pl. 32, fig. 34; Pl. 18, fig. 35; Pl. 20. fig. 79.

Ribs and revolving ridges higher and sharper, and not so numerous as in the preceding species, the intersections produced, prickly, aperture more attenuated into a canal below; yellowish brown, irregularly mottled or streaked with chestnut.

Length, 13–25 mill.

Europe.

Var. CANCELLATA, Sowb. A large form, with convex whorls; white or light purplish with a lighter central band.

Var. PUNGENS, Monts. Shell small, thick; brownish, with white blotches.

Var. HISTRIX, Jan. Intersections of the sculpture spinose.

Digitized by Google

Var. RUDIS, Scacchi. Whorls less convex, shell thicker, apex more obtuse than the type, sculpture closer, less lamellar, canal shorter. Appears to form a connection between this species and *M. purpurea*.

C. reticulata, Renieri (Pl. 18, fig. 35), and *C. scabra*, Jeffreys (Pl. 20, fig. 79) are synonyms.

C. CLATHRATA, Marcel de Serres. Pl. 33, fig. 68; Pl. 16, figs. 68, 70.

Conspicuously latticed with coarse sculpture; aperture large, truncate at base; yellowish white.

Mediterranean and *Adriatic; W. Africa.*

The synonyms include *C. rudis*, Phil. (fig. 68); *C. granum*, Phil.; *C. quadrillum*, Dujardin; *C. cancellata*, Calcara, and *C. Delosensis*, Reeve (Pl. 16, figs. 68, 70.)

C. LEUFROYI, Michaud. Pl. 18, fig. 33.

Ribs strong, rounded, not crossing the slightly concave subsutural area, encircled by very fine striæ, which cross the ribs; yellowish gray, under a thin yellowish brown epidermis—of which it is usually denuded, variegated by irregular chestnut blotches arranged in two broad bands on the body-whorl, and a single band on those of the spire. Length, 15–18 mill.

Europe, Canary Islands.

Var. CARNOSULA, Jeffreys. Pale flesh-color. Length, 20–22 mill.

Var. ALBIDA, Bucq., Dautz. et Dollf. Uniform whitish. In sponges from Barbary.

C. LINEARIS, Montagu. Pl. 18, fig. 34.

Longitudinal ribs rounded, strong, crossed by rather numerous revolving lines; yellowish gray, the lines chestnut.

Length, 9 mill.

Europe, Canary Islands.

Animal sluggish, frequently turns on its back and floats at the surface of the water, as do the related species. Spawn-cases separate, hemispherical, thin, membranous, one-fifth of an inch in diameter, with a small oval hole in the centre. They are attached at the base to the inside of old bivalve shells and to other smooth surfaces. Each capsule contains from 200 to 300 fry. These are of a brown color and exquisitely reticulated, each

Digitized by Google

having a single whorl, globular, and partially umbilicate, with a roundish mouth and an incomplete canal like that of Ianthina. The fry, when in the capsule, are very restless, and gyrate freely by means of their ciliated front lobes.—JEFFREYS, Brit. Conch., iv, 369.

Var. MAJOR, Requien. Nearly double the usual size.

Var. BREVIS, Requien. Shell short.

Var. ÆQUALIS, Jeffreys. Broader, with more rounded whorls and closer, less prominent sculpture than the type; apex yellowish white, colored lines regularly distributed and of a paler hue, or altogether wanting. Includes vars. *intermedia* and *pallida* of Forbes and Hanley.

Var. VIOLACEA, Monts. Dark violet.

Var. RUBROLINEATA, Monts. Revolving lines red instead of chestnut.

C. CONCINNA, Scacchi. Pl. 34, fig. 85.

Longitudinal ribs rounded, not very prominent, distant, revolving lines fine and numerous, canal very short, aperture wide, lip rather thick, smooth within, with shallow sinus; grayish, with interrupted bands and lines of chestnut. Length, 13 mill.

Mediterranean Sea.

Some authors consider this a var. *major* of the preceding species, but it appears to be sufficiently distinct in other respects besides that of size.

C. PLICATA, C. B. Ad. Pl. 30, fig. 98; Pl. 18, fig. 92.

Longitudinal ribs 11–12, prominent, crossed by about the same number of strong, thread-like ridges, the intersections sometimes produced into nodules; reddish chocolate, interior dark chocolate. Length, 6–8 mill.

New England to *Tampa Bay, West Coast of Florida.*

The shell is only whitish in dead specimens. Prof. Adams changed the name to *plicosa*, because Lamarck described a fossil *Pleurotoma plicata;* of course, in Clathurella the original name can still be used. The synonyms include *C. brunnea*, Perkins, and *C. Jewetti*, Stearns (Pl. 18, fig. 92), the latter found on oysters at Tampa Bay, Fla.

Digitized by Google

C. CANDIDULA, Reeve. Pl. 18, figs. 24, 23, 25.

Longitudinally plicate, revolving ridges rather distant, conspicuous; pale straw-color, lip tinged with pink.

West Indies.

The figure is said to be highly magnified, but the dimensions are not given.

Var. D'ORBIGNYI, Reeve (fig. 23). Longitudinal plications obsolete.

Var. CLATHRATA, Reeve (fig. 25). Light brown, variegated with reddish chestnut.

C. QUADRATA, Reeve. Pl. 18, fig. 31.

Strongly biangulated on the body-whorl; ribs distant, conspicuous, revolving sculpture fine and close; whitish or yellowish; the interstices of the ribs often chestnut-color.

Length, 5·5 mill.

West Indies.

Described by Reeve without locality. His figure is three times the size given above, but there are good reasons for supposing it to be magnified; among them, is the fact that Prof. C. B. Adams obtained a shell in Jamaica which, except for its diminutive size, exactly corresponds with Reeve's figure. He proposed to call his species *M. diminuta*, in case it should prove distinct. My specimens confirm his suspicion and Krebs' conviction that the two species are identical.

C. ANGULIFERA, Reeve. Pl. 18, fig. 22.

Body-whorl biangulated, the upper and lower parts chestnut, the middle yellowish.

West Indies.

Dimensions not given, but greatly magnified in the figure.

C. MONILIFERA, Sowb. Pl. 14, fig. 9; Pl. 18, fig. 43.

Shell minutely reticulated; white, tessellately painted with squares, each composed of four short parallel brown lines.

Length, 5 mill.

West Indies.

Described as a Columbella, and included in that genus in the "Manual," v, p. 149; the figure, however, shows the Pleurotomid notch. *P. scalpta*, Reeve (Pl. 18, fig. 43), and *P. fuscolineata*, C. B. Ad., are synonyms.

Digitized by Google

C. GUILDINGII, Reeve. Pl. 18, fig. 44.

Whorls slightly concavely shouldered above, nodosely plicated beneath, transversely very closely striated; very dark chocolate or blackish, interior same color. Length, 8 mill.

West Indies.

C. ANTILLARUM, d'Orbigny. Pl. 20, figs. 82, 85, 88.

Whitish, whorls clathrate, slightly, narrowly shouldered. Length, 5–9 mill.

West Indies.

I think that *C. Lavalleana*, d'Orb. (fig. 85), and *C. Vespucciana*, d'Orb. (fig. 88), are synonyms.

C. CARIBÆA, d'Orb. Pl. 20, fig. 87.

Distinctly shouldered, longitudinally costate, encircled by thread-like lines; light yellowish brown or whitish. Length, 4·5 mill.

West Indies.

C. ELATIOR, d'Orb. Pl. 20, fig. 84.

Shell finely clathrate, whitish or light brown. Length, 4 mill.

West Indies.

C. RUBRICATA, Reeve. Pl. 18, fig. 29; Pl. 20, fig. 83.

Very distantly ribbed, closely transversely striate; yellowish white to chestnut-colored. Length, 6 mill.

West Indies.

I think *C. Auberiana*, d'Orb. (Pl. 20, fig. 83) is a synonym.

C. CANDEANA, d'Orb. Pl. 20, fig. 93.

Whitish, spire longitudinally plicate, body-whorl without sculpture except a few revolving lines at the base. Length, 4 mill.

West Indies.

C. MACROSTOMA, Reeve. Pl. 18, fig. 27.

Whorls convex, spire obtuse: ribs rounded, large, close, oblique, vanishing below, aperture very narrow, sinuous; bluish purple, lineated transversely with red.

West Indies.

Figure greatly magnified.

C. OCCIDENTALIS, Reeve. Pl. 18, fig. 28.

The close longitudinal ribs are nodosely decussated by narrow

Digitized by Google

revolving ridges; canal narrow, rather long, curved; chestnut-brown.

West Indies.

Dimensions not given, but figure much magnified.

C. TURBINELLOIDES, Reeve. Pl. 18, fig. 26.

Whorls smooth, longitudinally ribbed, ribs varicose; whitish, banded with chocolate lines, arranged in pairs.

West Indies.

No dimensions given, but figure greatly magnified.

C. INFLEXA, von Martens. Pl. 20, fig. 95.

Whorls angulate in the middle, with about nine rounded ribs, and numerous revolving striæ; pink-white. Length, 5 mill.

Tropical Atlantic Ocean.

Said to be allied to *C. Auberiana*, d'Orb. A single specimen found in the stomach of a fish.

C. OCCATA, Hinds. Pl. 18, fig. 46.

Shell light yellowish brown. Length, 10 mill.

Magnetic Island, West Coast of Veragua (Hinds).

C. MERITA, Hinds. Pl. 18, fig. 32.

Shell shortly plicately ribbed, transversely striated, angulated next the suture; yellowish, back of last whorl clouded with brown, with a brown line on the shoulder-angle. Length, 12 mill.

Gulf of Nicoya, Central America (Hinds).

C. SCULPTA, Hinds. Pl. 17, fig. 14.

Whorls rather flatly convex, ribbed longitudinally, crossed by fine revolving lines; ribs rounded, rather compressed, leaving off near the suture, outer lip externally varicose; yellowish, banded with light brown. Length, 21 mill.

Panama.

Hinds' unique specimen, figured above, was not adult; I add the varicose lip from an adult before me.

C. CANFIELDI, Dall. Pl. 20, fig. 91.

Shell narrowly shouldered; numerous indistinct longitudinal plications fade out towards the lower part of the body-whorl, about sixteen revolving ridges on the body-whorl, sinus deep;

Digitized by Google

yellowish white, without bands or with from one to three narrow chocolate bands. Length, 8 mill.

Monterey, Cal.

C. AFFINIS, Dall. Pl. 20, fig. 80.

Strongly ribbed and transversely striated, narrowly shouldered; outer lip internally lirate, much thickened, with two strong denticulations, inner lip with four or five crenulations on the columella; livid purple, with a single white band on the middle of the body-whorl, appearing just above the suture of the penultimate whorl. Length, 6 mill.

Cape St. Lucas, L. Cal.; San Miguel Isl., So. California.

C. HAYSIANA, Angas. Pl. 15, fig 46.

Whorls angulated, the decussating sculpture forming nodules; dull chalky gray, apex and interior of aperture purple.

Length, 12 mill.

New South Wales, Australia.

C. RETICOSA, Adams and Angas.

Ovately fusiform, fuscous, with a median white band; whorls six, rather flat, with scarcely a sutural angle, reticulated (but not nodulous) by sculpture; aperture elongately ovate, lip nodosely lirate within. L. 12, diam. 5 mill.

Port Jackson, Australia.

"A species very similar in its general character to *C. purpurea*, Bl., from the Mediterranean."

C. TENUILIRATA, Angas. Pl. 16, fig. 52.

Shell solid, opaque, pale brown; longitudinal ribs eight, compressed, prominent, crossed by narrow, distant erect ridges, becoming sharply angular at the intersection, the entire spaces between them being very closely and regularly ornamented with fine hair-like concentric striæ; outer lip thin-edged, variced, the interior with a tubercle next the posterior sinus, which is broad and shallow. Length, 8 mill.

Port Jackson, Australia.

C. RISSOIDES, Reeve. Pl. 27, figs. 8, 9.

Shell smooth, shining, semitransparent; first three whorls longitudinally plaited, the rest smooth, the last with a varix nearly opposite the aperture (accidental?); columella spirally

Digitized by Google

twisted, lip rather thickened, delicately denticulated within, sinus small, distinct; whitish, washed with clouded yellow streaks, apex pink. Length, 23 mill.

Isle of Ticao, Philippines, on the reefs (Cuming).

A curious shell, with which I am not acquainted.

C. GRANULOSISSIMA, Tenison-Woods. Pl. 32, fig. 20.

Shell somewhat like *C. sculptilis*, but differs in having the fine spiral liræ conspicuously granular, about every fourth one being larger than the others; color uniform pale brown; longitudinal ribs very conspicuous; sinus very faint. Length, 6·5 mill.

N. Tasmania.

Figured from a type specimen in the collection of the Royal Society of Tasmania.

C. SCULPTILIS, Angas. Pl. 16, fig. 51.

Moderately solid, pale brown; whorls seven, rounded, a little excavated next the sutures; with about nine rounded ribs, between which are numerous fine erect longitudinal striæ, which become crescent-shaped on the flattened area below the sutures, and encircled with numerous concentric, somewhat irregular ridges, which are slightly nodulous at the intersections; outer lip varicose, slightly sulcate within, sinus rather deep.

Length, 8 mill.

Port Jackson, Australia.

C. SCULPTILIOR, Tenison-Woods. Pl. 32, fig. 27.

Differs from the preceding species in being smaller, without smooth subsutural space, ribs sixteen, revolving sculpture alternately larger and smaller, lines of growth not very visible; brownish white. Length, 5·5 mill.

Tasmania.

Figured from a type in Coll. Roy. Soc. of Tasmania.

C. DEBILIS, Hinds. Pl. 17, fig. 16.

Whorls rounded, without sutural shoulder, ribs small, close, extending to the sutures, crossed by revolving striæ; yellowish, darker between the ribs. Length, 11 mill.

New Guinea, Straits of Macassar (Hinds);

Darnley Isl., Australia (Brazier).

Digitized by Google

C. OXYCLATHRUS, Martens. Pl. 16, fig. 49.

Whorls clathrate by distant longitudinal and revolving liræ, forming nodes at the intersections, interstices finely cancellate; sinus narrow and deep; light yellowish brown.

Length, 1 inch.

New Guinea.

C. CUMINGII, Powis. Pl. 26, fig. 76; Pl. 23, fig. 90.

Ribs slightly nodulous, columella spirally plaited, canal very short and slightly recurved; lip somewhat thin, without external varix, sinus small, distinct; pale orange-brown with small deeper-colored spots, the revolving striæ white. Length, 34 mill.

Grimwood's Island; Philippines.

C. albibalteata, Reeve (Pl. 23, f. 90), appears to be a slight variation only in coloring and sculpture from the type.

C. TRITONOIDES, Reeve. Pl. 23, fig. 91.

Delicately cancellated with very finely nodulous longitudinal ribs and elevated transverse striæ; lip thickened, sinus small; yellowish brown, obscurely banded with white in the middle.

Length, 23 mill.

Philippines (Cuming).

C. FENESTRATA, Reeve. Pl. 26, fig. 83.

Shell thin, pellucid, whorls latticed throughout with rather distant superficial ridges, lip simple, sinus rather broad; transparent white, faintly stained with orange. Length, 10 mill.

Philippines, coral sand at 9 fms. (Cuming).

The Messrs. Adams place this in Daphnella on account of its thin lip, a feature which I suppose to be due to juvenility, as the shell has the facies of a Clathurella.

C. OCTANGULA, Dunker. Pl. 16, fig. 50.

Shell solid, obtusely shouldered, strongly ribbed, transversely substriate; yellowish white, with an interrupted chestnut band.

Length, 10 mill.

Japan.

C. SINCLAIRI, E. A. Smith. Pl. 34, fig. 91.

Spiral striæ close, most apparent in the interstices of the ribs; pale brown or purplish brown, with a central pale spiral band.

Length, 11 mill.

New Zealand.

First described by Prof. F. W. Hutton as *C. Letourneuxiana*,

Digitized by Google

Crosse. Subsequently, ascertaining that it is distinct from that species, he named it *C. luteofasciata*, Reeve—from which it is also distinct. Mr. Gillies calls it as above.

C. FUSCOBALTEATA, Smith. Pl. 25, fig. 59.

Yellowish, pale violet or lilac towards the apex, banded with light brown, one band at the top of the whorls darker than the rest; ribs about sixteen, crossed by fine liræ; lip thickened within and exteriorly, thin at the extreme edge, smooth interiorly, sinus sutural, small. Length, 12 mill.

Japan.

C. SUBZONATA, Smith. Pl. 25, fig. 56.

Light yellowish brown, more or less distinctly medianly banded, with opaque white lines interrupted by dark brown dots or short lines, sometimes marked with opaque white streaks just beneath the suture, and with a second less apparent transverse band around the lower part of the body-whorl; ribs sixteen, crossed by spiral liræ; lip moderately thickened, smooth within, with a small sutural sinus. Length, 17 mill.

Japan.

C. CANALICULATA, Reeve. Pl. 17, fig. 9.

Ovately turreted, suture of the spire channeled, whorls finely latticed with raised striæ, sinus large; whitish.

Length, 9 mill.

Hab. unknown.

A light elegantly formed shell, contracted at the base.

C. ROBILLARDI, Barclay. Pl. 16, fig. 55.

Shell thin, white, with distant, thin, ridge-like ribs, and distant revolving liræ, more closely striate at the base.

Length, 1 inch.

Mauritius.

C. BICOLOR, Angas. Pl. 16, fig. 61.

Rather solid, light yellowish brown, the sutures, lower half of the body-whorl and interior of aperture reddish chestnut; whorls very narrowly, obtusely shouldered; longitudinal ribs close, crossed by revolving striæ; outer lip thin, denticulated within, strongly varicose externally, sinus rather broad and deep.

Length, 7–12 mill.

Port Jackson, Australia.

It is possible that *Drillia vexillum*, Reeve, is identical with this species, and if so, that name has priority.

Digitized by Google

C. ALBOCINCTA, Angas. Pl. 17, fig. 84.

Moderately solid; reddish brown, with a rather broad white band on the middle of the body-whorl, visible on the spire; lip thickened, dentate within. Length, 5 mill.

Port Jackson, Australia.

C. ZONULATA, Angas. Pl. 17, fig. 89.

Rather solid, light brown, banded with ashy gray below the sutures and towards the base of the last whorl, encircled with rather distant fine brown lines; longitudinally nodosely plicate, transversely closely lirate; lip thin, varicose, sinus moderate.

Length, 8 mill.

Port Jackson, Australia.

C. RUFOZONATA, Angas. Pl. 17, fig. 100.

Shell solid, white, sometimes with a zone of double interrupted chestnut lines near the base of the body-whorl, similar markings being apparent here and there near the upper portion of the whorls; ribs nodose. Length, 5 mill.

Port Jackson, Australia.

C. PUSTULATA, Angas. Pl. 17, fig. 85.

Moderately solid, whorls rounded, white, irregularly longitudinally flamed with chestnut on the upper whorls, with two broad brown bands on the last whorl; sinus rather broad and shallow. Length, 7 mill.

Port Jackson, Australia.

May be at once recognized by the stout granules at the base of the pillar.

C. MODESTA, Angas. Pl. 17, fig. 92.

Solid, fulvous brown; intersections of sculpture nodulous; columella with a few strong granulations at the base.

Length, 5 mill.

Port Jackson, Australia.

Closely allied to and perhaps identical with *C. granulosissima*, Tenison-Woods.

C. BRENCHLEYI, Angas. Pl. 17, fig 93.

Shell moderately solid, light brown, inclining to ash-color towards the apex; aperture tinged with brown.

Length, 18 mill.

N. S. Wales, Australia.

Digitized by Google

C. GRACILISPIRA, E. A Smith. Pl. 17, fig. 94.

Light yellowish brown, faintly banded with chestnut between the ribs on the upper part of the whorls, and stained with chestnut below the middle of the body-whorl. Length, 15 mill.

Japan.

More slender, the whorls more convex, the extremities more lengthened and attenuated than *C. bicolor*, Angas.

C. LETOURNEUXIANA, Crosse. Pl. 17, figs. 87, 86; Pl. 34, fig. 99.

Yellowish brown, or light reddish brown. Length, 12 mill.

New South Wales; Tasmania.

Var. LALLEMANTIANA, Crosse. Pl. 17, fig. 86.

Two of the revolving lines more prominent, ridge-like.

C. incrusta, Tenison-Woods (Pl. 34, fig. 99), is a smaller shell, 7 mill., with two of the revolving striæ more prominent (on the body-whorl 8–9), slightly keel-like. I figure it from a specimen sent to me by Mr. C. E. Beddome, of Tasmania. I believe it to be a synonym of *C. Letourneuxiana*, var., one of my specimens of the latter exhibiting a transition from the normal type with equal revolving sculpture to the form with two more prominent lines.

C. PYRAMIDULA, Reeve. Pl. 17, fig. 20.

Closely latticed with small numerous flexuous longitudinal ribs and revolving striæ, a narrow shoulder below the sutures; body-whorl somewhat truncated at the base; yellowish brown, or yellowish white. Length 11 mill.

Habitat unknown (Reeve); *New Guinea* (Brazier).

C. NAGASAKIENSIS, Smith. Pl. 19, fig. 71.

Yellowish brown; closely sculptured by longitudinal numerous ribs and spiral striæ; a very slight concave constriction below the sutures; aperture rather small, light brown within, outer lip thin. Length, 17 mill.

Japan.

Has the appearance of immaturity.

C. MUTICA, Hinds. Pl. 34, fig. 98.

Not ribbed, transversely striate; yellowish brown, with longitudinal chestnut strigations and a median white band, chestnut at the base. Length, 15 mill.

Straits of Malacca, 17 fms., mud (Hinds).

Digitized by Google

C. SCALARIS, Hinds. Pl. 16, fig. 78.

Ribs rounded, but narrower than represented by the figure, running into the suture, like the lamellæ of Scalaria, closely transversely striate, whorls convex, with well-impressed sutures; light yellowish brown, with a narrow indistinct chestnut zone below the middle of the body-whorl. Length, 9 mill.

Straits of Macassar, coarse sand, 12 fms. (Hinds).

C. AMABILIS, Hinds. Pl. 17, fig. 6.

Ribs few, distant, narrow, revolving striæ fine and close; pale orange-brown, last whorl with a narrow white band, suture ornamented with white spots. Length, 16 mill.

Straits of Malacca, 17 fms., mud (Hinds).

Very closely allied to the preceding species, but larger, with less numerous ribs.

C. NEXA, Reeve. Pl. 16, fig. 69.

Whorls rounded, plicately ribbed, encircled with fine narrow cords, becoming nodulous on crossing the ribs; lip flattened, sinus broad; whitish, stained with chestnut, the cords darker chestnut or chocolate. Length, 12–15 mill.

Philippines (Cuming); *Viti Islands* (Garrett).

C. PHILIPPINENSIS, Reeve. Pl. 16, fig. 81.

Ventricose, rather transparent, white, longitudinally ribbed, ribs very delicate, rather compressed, somewhat distant, and variously painted with black or chestnut and opaque-white. Length, 14 mill.

Philippines, under stones, at low-water (Cuming).

I suspect that this will prove to be a color-variety of the preceding species.

C. GRANICOSTATA, Reeve. Pl. 16, fig. 80; Pl. 17, fig. 88.

Yellowish or blush-brown, with a white band above the middle, the nodules darker-colored. Length, 9–13 mill.

Viti Islands (Garrett); *Mauritius* (Robillard).

C. rufinodis, Martens (fig. 88), is a synonym.

Digitized by Google

C. METCALFIANA, Reeve. Pl. 17, fig. 17.

Shell ovate, rather thick, with close revolving elevated striæ, longitudinally somewhat obsoletely grooved towards the apex; white, painted with two bands of reddish brown spots.

Length, 8 mill.

Habitat unknown.

C. FORAMINATA, Reeve. Pl. 17, fig. 7.

Very closely latticed with narrow longitudinal and transverse striæ; yellowish. Length, 6 mill.

Hab. unknown.

C. FIMBRIATA, Hinds. Pl. 16, fig. 82.

Longitudinally closely, numerously laminate, the laminæ short, flexuous, dentate; lip crenulated, reflected, sinus very small; pale reddish brown, with a central white, narrow band.

Length, 9 mill.

New Guinea.

C. PARVULA, Reeve. Pl. 16, fig. 72.

Whorls rather swollen, longitudinally ribbed, transversely very minutely ridged; pale yellowish brown. Length, 6 mill.?

Habitat unknown.

Reeve gives no dimensions, but his figure is probably magnified three times—as are most of the others upon the same plate.

C. FOVEOLATA, Reeve. Pl. 16, fig. 73.

Reticulated with strong elevated ridges, granose at the intersections; white. Length, 5 mill.

Habitat unknown.

"The interstices of the reticulations are peculiarly deeply pitted."

C. REFLEXA, Reeve. Pl. 16, fig. 74.

Shell Triton-shaped, longitudinally ribbed, transversely strongly ridged; aperture rather long, sinuous, lip reflexed, denticulated within; whitish, tinged with chestnut between the ribs. Length, 7 mill.

Hab. unknown (Reeve); *N. Guinea* (Brazier).

C. BILINEATA, Angas. Pl. 17, fig. 4.

Whorls angulate above, coarsely longitudinally ribbed and transversely ridged, the interstices very finely decussately striated; posterior sinus very shallow; pale straw-color or light

Digitized by Google

brown, nearly white round the aperture and at the base, with a narrow chestnut band just below the suture, and a second between the periphery and base of the last whorl.

Length, 4 mill.

Port Jackson, Australia.

C. BICARINATA, Pease. Pl. 17, fig. 90.

Shell white, decussately striated, the body-whorl with two, the spire-whorls with one stout revolving keel, crenulated on the edge; sinus a very narrow deep slit terminating in a round hole.

Length, 10 mill.

Kingsmill Islands.

C. CARINULATA, Souverbie. Pl. 17, fig. 95.

Longitudinally obscurely ribbed, and transversely striated, ribs disappearing towards the base, where the striæ become stronger; body-whorl tricarinate, those of the spire bicarinate, carinæ nodulous; whitish, maculated with yellowish chestnut.

Length, 8 mill.

New Caledonia.

C. TRICARINATA, Reeve. Pl. 17, fig. 15; Pl. 26, fig. 91.

Shell finely decussated by raised striæ, last whorl three-, upper ones one-keeled; white. Length, 12 mill.

Philippines (Cuming); *Japan* (Dunker).

Mr. Garrett writes to me that this = the unfigured *Purpura exilis*, Dunker, from the Viti Islands. See Manual, ii, 176. I think *M. lactea*, Reeve (Pl. 26, fig. 91), is a larger specimen of the same species.

C. HINDSII, Reeve. Pl. 17, fig. 12.

White, faintly variegated with pale brown; last whorl with four distant revolving ridges, the others with two, delicately cancellated with numerous compressed smaller ribs. Figure slightly magnified.

Philippines.

C. PULCHERRIMA, H. Adams. Pl. 17, fig. 99.

Clathrate by three revolving ridges, and longitudinal lines; whitish; whorls four, convex, the last subventricose.

Length, 7 mill.

New Hebrides.

Digitized by Google

C. PUNCTICINCTA, Reeve. Pl. 16, fig. 79.

Longitudinally rather obscurely plicated, interstices very minutely striated, sinus rather large; whitish, with an interrupted band of chestnut on the periphery, coloring the interstices of the ribs so as to form a circle of spots. Length, 8 mill.

Hab. unknown.

C. RETUSA, Hinds. Pl. 16, fig. 83.

Ribs rounded, close, forming a coronal on the shoulder-angle, crossed by revolving striæ; orange-brown, purplish at the apex. Length, 8 mill.

Straits of Macassar, sand at 8 fms. (Hinds).

C. EXIMIA, Reeve. Pl. 17, fig. 5.

Shell with narrow longitudinal lamellæ, fimbriated by the intersection of revolving sculpture; sinus rather indistinct, canal slightly twisted. Length, 18 mill.

Philippines, under stones at low-water (Cuming).

I am not acquainted with this Trophon-like species. The sinus, though somewhat indistinct, is fully sufficient, according to Reeve, to place it in the Pleurotomidæ.

C. SEMIGRANOSA, Reeve. Pl. 11, fig. 98.

Whorls concave round the upper part, nodosely ribbed in the middle, granulated beneath; whitish, encircled round the lower part with an orange band. Length, 8 mill.

Hab. unknown.

C. CAVERNOSA, Reeve. Pl. 17, fig. 10; Pl. 19, fig. 69.

Slightly angulated above, longitudinally distantly ribbed, latticed with narrow raised revolving ridges, cavernously grooved near the base; chestnut, lighter on the ridges.

Length, 6–7 mill.

Philippines (Cuming); *Viti Is.* (Garrett).

C. infrasulcata, Garrett (Pl. 19, f. 69), is a synonym: the figure does not represent the type specimen nearly as well as does that of Reeve.

C. MICANS, Hinds. Pl. 17, fig. 8.

Chestnut-color, with small, rather sharp, whitish, oblique ribs, fading towards the suture; back of last whorl smooth; lip thin, acute, smooth within. Length, 8 mill.

Gulf of Papagayo, mud at 14 fms. (Hinds).

Digitized by Google

C. GLUMACEA, Hinds. Pl. 17, fig. 13.

Pale brown, shining, rather strongly shouldered; ribs short, rounded, running into the suture, transversely striated, aperture brown. Length, 6 mill.

New Guinea, mud at 22 fms. (Hinds).

C. DENTIFERA, Hinds. Pl. 17, fig. 19.

Whorls five, ribbed, crossed by revolving lines; ribs numerous, small, narrow, running into the suture; lip crenulated, dilated and toothed at the lower part, columella furnished with a tooth at the lower part; orange-brown. Length, 13 mill.

N. Guinea; Straits of Malacca, mud at 5–17 fms. (Hinds).

C. MARTENSI, Nevill. Pl. 19, fig. 47.

Dark brown, the granules lilac-color; columella twisted in the middle, with a few minute denticulations at its edge, violet; outer lip bright brown, with a deep rounded sinus, and four strong lilac-colored teeth. Length, 5 mill.

Ceylon, in sand.

C. BLANFORDI, Nevill. Pl. 19, fig. 48.

Granulate, with an excavated furrow near the base of the body-whorl; lip thickened, with two or three granules, and a rather large sinus; lilac-colored throughout. Length, 5·75 mill.

Annesley Bay, Abyssinia; Polynesia.

C. rosea, Dunker, from McKean Isl., Phœnix Group, appears to be the same.

C. POLYNESIENSIS, Reeve. Pl. 17, fig. 3.

Whorls narrowly obtusely shouldered, longitudinally closely ribbed, transversely striated; lip thickened, sinus large; white. Length, 6–8 mill.

Paumotus Is.

C. REEVEANA, Deshayes. Pl. 19, figs. 56, 75.

Surface almost microscopically decussated, the spiral sculpture being generally the strongest; whitish, with light chestnut revolving lines, irregularly distributed, approximating or distant. Length, 7–9 mill.

Isle of Bourbon, Mauritius, Andaman Is.,
Viti and *Paumotus Is.*

C. tumida, Pease (fig. 75), and, according to A. Garrett, the unfigured *C. concinna*, Dunker, are synonyms.

Digitized by Google

C. CYCLOPHORA, Desh. Pl. 19, fig. 54.

Obsoletely longitudinally plicate, transversely distinctly striate, suture somewhat corded and noduled; white flamed with brown. Length, 7 mill.

Isle of Bourbon; Mauritius.

Appears to be very closely related to the preceding species.

C. LABIOSA, E. A. Smith. Pl. 20, fig. 89.

Obliquely longitudinally costate, transversely sulcate, sulci indistinct on the ribs, whorls angulated above; white, with a pellucid zone below the suture. Length, 5 mill.

Whydah, W. Africa.

C. SMITHI, Nevill. Pl. 19, fig. 49.

Whorls slopingly shouldered above the middle, smooth above the angle, closely reticulated and granular below it, longitudinal sculpture becoming obsolete towards the base; sometimes additionally keeled just below the suture; white, tinged with pale brown on the columella and outer lip. Length, 3·5 mill.

Persian Gulf.

C. ALBOSTRIGATA, Baird. Pl. 19, fig. 53.

Whitish or light yellowish brown, marked on the back of the body-whorl with a pure white chalky-looking band, and in some instances with an interrupted band of brown. Length, 6 mili.

New Caledonia.

C. TINCTA, Reeve. Pl. 16, figs. 76, 75; Pl. 17, fig. 96; Pl. 32, fig. 40.

Longitudinal ribs strong, with revolving riblets reticulating them, interstices deep; sinus broad; white, interruptedly banded above and below with orange-brown spots. Length, 9–12 mill.

Viti Is., New Caledonia, Paumotus, New Guinea.

C. albifuniculata, Reeve (fig. 75), is a synonym, and *C. rubroguttata*, H. Adams (Pl. 17, fig. 96), which Mr. Garrett writes to me = the unfigured *C. corrugata*, Dunker, appears to me to be merely a small variety.

C. FELINA, Hinds. Pl. 17, fig. 18; Pl. 19, fig. 70; Pl. 22, fig. 64; Pl. 32, fig. 40.

Decussated by longitudinal and revolving sculpture, yellowish white, with chestnut short longitudinal strigations upon the

Digitized by Google

granules, often upon every alternate rib, interrupted by a central white space, and again painted towards the base.

Length, 8–10 mill.

New Ireland, *Upolu*, *New Caledonia*.

Reeve's figure (fig. 18) is a very poor one; that of Hinds (Pl. 32, fig. 40) is better, but neither that, nor the figure of one of the synonyms, *C. apicalis*, Montrouzier (Pl. 22, fig. 64), exhibits perfectly the usual arrangement of the coloring; sometimes this coloring is broken up and more or less dispersed over the surface, and then there is considerable resemblance to the preceding species. *Cl. picta*, Dunker (unfigured), is probably identical, and *Cl. maculosa*, Pease (Pl. 19, fig. 70), appears to be a small variety.

C. PUNCTIFERA, Garrett. Pl. 19, fig. 74.

Ribs small, narrower than their interstices, ten to eleven on the body-whorl, crossed by smaller transverse ridges, the granules of intersection light brown, the rest of the shell cinereous; sinus rather large, semicircular, lip six-toothed within.

Length, 5 mill.

Society, *Samoa* and *Viti Islands*.

This species is allied to the preceding; the spots on the granulated ribs are not shown on the figure—in which the ribs also are too narrow.

C. PERPLEXA, Nevill. Pl. 19, fig. 65.

Uniform ash-color, a shade or two darker in the interstices of the ribs and near the apex; columella, outer margin of the lip and interior of the aperture bright chestnut-brown; outer lip very sharp, irregularly undulating, obsoletely granulated just within the aperture. Length, 6 mill.

Bombay, *Ceylon*.

C. SINGULARIS, Nevill. Pl. 19, fig. 61.

Faintly and obtusely ribbed, crossed by distant raised lines; whorls obtusely angulated at the periphery; white, in the centre of the ribs on the last whorl ornamented with obsolete brown spots. Length, 8·5 mill.

Andaman Islands.

C. MASONI, Nevill. Pl. 19, fig. 60.

Sharply shouldered, white, outer lip granular within.

Length, 4 mill.

Andaman Islands.

Digitized by Google

C. ENGINÆFORMIS, Nevill. Pl. 19, fig. 58.

Openly clathrate, nodulous at the intersections of the sculpture; white, with a single, somewhat irregular yellow band, repeated a little below the middle of the last whorl; some of the granules on this band are yellow, whilst others are white.

Length, 5·5 mill.

Ceylon.

C. CONTORTULA, Nevill. Pl. 19, fig. 55.

White, with a pink tinge towards the apex. Length, 5·5 mill.

Ceylon.

C. OBTUSA, Reeve. Pl. 16, fig. 77.

Obtusely ribbed, transversely finely ridged, sinus broad; pale yellow. Length, 15 mill?

Habitat unknown.

No dimensions are given by Reeve. Perhaps his figure is a magnified one.

C. ARMSTRONGI, Nevill. Pl. 19, fig. 59.

Distantly and obtusely ribbed, crossed by fine regular striæ; columella much twisted, with a shining, granulated callosity, outer lip very closely minutely granulate just within the aperture, sinus remarkably wide, deeply excavated; chocolate-brown.

Length, 5 mill.

Andaman Is.

C. ARCTATA, Reeve. Pl. 17, fig. 2.

Ribs corded with raised striæ, lip thickened, peculiarly effused, sinus large; dull white. Length, 7 mill.

Philippines (Cuming); *Darnley I.*, *N. Australia* (Brazier).

C. DÆDALEA, Garrett. Pl. 19, fig. 66.

Yellowish white, maculated with small irregular chestnut-brown spots, mostly confined to the ribs; whorls slightly tabulated at the sutures; ribs rounded, compressed, 13–14 on the body-whorl, slightly oblique, crossed by small, revolving elevated lines, forming granules at the intersections; sinus deep, outer lip varicose, crenulate and shortly lirate within, columella faintly rugose with oblique wrinkles. Length, 8 mill.

Viti Islands.

The coloration is very like *C. felina*, Hinds, but this is a narrower species.

Digitized by Google

C. BRAZIERI, Angas. Pl. 17, fig. 98.

Whorls narrowly shouldered, longitudinally plicate, transversely finely ridged; outer lip thin, simple within, sinus wide, not very deep; pale brown, a little darker on the body-whorl and at the apex. Length, 6 mill.

Port Jackson, Australia.

Described as a Clathurella, but the thin outer lip might remove it from the group—unless the diagnosis is from a young shell.

C. CÆLATA, Garrett. Pl. 20, fig. 99.

Ribs ten, nodose, crossed by 10–11 revolving ridges, interstices scabrous with close, elevated longitudinal striæ; sinus large; cinereous, stained with luteous, nodules whitish and obsoletely lineated in the spiral grooves. Length, 6 mill.

Viti Islands.

C. GRANOSA, Dunker. Pl. 19, fig. 72.

Cinereous, with four or five revolving brown lines on the upper whorls and three near the base; ribs twelve, rather stout, interstices with small transverse ridges, which form nodules on the ribs; sinus large, rounded, peristome 6–7 toothed within.
Length, 5 mill.

Viti and *Samoa Islands.*

The figure does not do justice to this species; it is narrower, and the lineations are more prominent. Dunker's species remains unfigured, but its identity with *C. semilineata*, Garrett, is admitted by the latter in a note to me.

C. LINEOLATA, Gray. Pl. 21, fig. 14.

Somewhat fusiformly oblong, longitudinally obtusely ribbed; whitish, encircled with very fine brown lines. Length, 6 mill.

Hab. unknown.

"May be known by the fine hair-lines with which it is encircled; the ribs have not that granular appearance represented in the figure." The figure does not show the brown lines—in fact is valueless, so that we can only guess at the probable relationship of this to the preceding species.

Digitized by Google

C. SCALARINA, Desh. Pl. 19, fig. 52.

Whitish, with a narrow chestnut or chocolate sutural band, and another below the middle of the body-whorl only.

Length, 6 mill.

Ceylon and *Mauritius* (Nevill); *Isle of Bourbon* (Deshayes).

Pease makes this a synonym of *C. rugosa*, Mighels, but it is not nearly related to that species.

C. ALBA, Desh. Pl. 25, fig. 38.

White. Length, 4 mill.

Isle of Bourbon.

C. RAVA, Hinds. Pl. 18, fig. 42.

Fulvous, the interstices of the ribs and edge of the lip stained purple-red; sinus wide and deep. Length, 12 mill.

Isl of Mindanao, Philippines (Cuming).

C. VULTUOSA, Reeve. Pl. 15, figs. 33, 36; Pl. 16, fig. 66.

Yellowish white or light yellowish brown; apex sometimes rosaceous. Length, 8–10 mill.

Philippines.

C. efficta, Reeve (Pl. 16, fig. 66), locality unknown, apparently belongs here, as well as *C. compta*, Reeve (Pl. 15, fig. 36).

C. NASSOIDES, Reeve. Pl. 15, fig. 29.

Shell thin, as though pellucid, ribs close, obtuse; horny white, banded above and below with reddish brown. Length, 12 mill.

Hab. unknown.

C. GRAYI, Reeve. Pl. 15, fig. 31.

Light chestnut-brown, with two darker bands on the body-whorl. Length, 6·5 mill.

Hab. unknown.

C. LIRATA, Reeve. Pl. 16, fig. 56.

Shell ornamented with revolving ridges, sinus broad and large; yellowish white, edge of the lip stained with deep red within.

Length, 10 mill.

Philippines, sandy mud at 7 fms. (Cuming).

C. LANGUIDA, Reeve. Pl. 15, fig. 42.

Ribs and striæ rather distant, nodulous; sinus large; whitish, stained with reddish brown. Length, 9·5 mill.

Darnley Isl., N. Australia (Brazier).

Digitized by Google

C. RUGOSA, Mighels. Pl. 19, fig. 57.

Outer lip thickened, toothed, sinus large and rather deep; whitish, with a chestnut band at the suture, obscurely indicated on the middle of the body-whorl. Length, 6·5 mill.

Sandwich Islands (Mighels and Pease); *Upolu* (Dunker, Garrett); *Ceylon*, *Mauritius*, *Bourbon* (Nevill).

Var. CURCULIO, Nevill.

Ribs twelve, with four revolving keels on the whorls, of which the two middle ones are more prominent and spirally striated; two brown lines on the body-whorl, showing within the aperture. Length, 8 mill.

Var. FALLAX, Nevill.

Ribs nine, the transverse keels less unequal in size, only one brown line on the last whorl and within the aperture. Length, 4·5 mill.

According to Mr. Garrett the unfigured *Cl. solidula* and *C. cincta*, Dunker, are synonyms of *rugosa*.

C. FORMOSA, Jeffreys. Pl. 33, fig. 61.

Sculpture variable, the longitudinal varying from striæ to ribs, sometimes nodulous; suture deep, with a sloping infrasutural groove; sinus remarkably deep and broad; thin, opaque, dark-colored. Length, 12·5 mill.

Europe, *North Atlantic*; deep sea.

C. TESSELLATA, Hinds. Pl. 15, fig. 24.

Whorls granular, decussated with longitudinal and spiral lines; painted with brown somewhat square spots. Length, 6 mill.

Straits of Macassar, coarse sand at 10 fms. (Hinds).

C. LEMNISCATA, Nevill. Pl. 15, fig. 28.

White, with a brown band just below the sutures, and a second one below the middle of the body-whorl. Length, 6·5 mill.

Ceylon, *Mauritius*.

C. MALLETI, Recluz. Pl. 20, figs. 100, 96.

Rose-red with a median white band; inner margin of aperture with 5–6 closely set teeth. Length, 4 mill.

Samoa and *Viti Islands* (Garrett); *Andaman Is.* (Nevill).

C. pinguis, Garrett (fig. 96), is a synonym.

Digitized by Google

C. PURPURASCENS, Dunker. Pl. 20, fig. 90.

Rose-red to violaceous, with a central white band; outer lip 5–6 toothed within. Length, 5 mill.

Viti Islands.

A narrower form, with less robust sculpture than *C. Malleti.* It is unfigured, but is admitted by Mr. Garrett to be identical with his *C. pulchella*, over which it has two years' priority of publication.

C. CLANDESTINA, Deshayes. Pl. 19, fig. 67; Pl. 20, fig. 81.

Minutely granular, light violaceous with two darker bands of the same color. Length, 5·5 mill.

Isle of Bourbon (Desh.); *Paumotus* (Pease);
Viti Is. (Garrett).

C. violacea, Pease (Pl. 20, fig. 81), is a synonym.

C. PURPURATA, Souverbie. Pl. 20, fig. 76.

Violaceous or rosy white to purplish, sometimes obscurely lighter banded in the middle; ribs evanescent towards the decidedly constricted base of the body-whorl, where the revolving sculpture becomes more prominent; lip much thickened, dentate within. Length, 9·5 mill.

N. Caledonia (Souverbie); *Viti Is.* (Schmeltz);
Paumotus (Garrett).

The specimens usually have a rounded shoulder on the whorls.

C. PUMILA, Mighels. Pl. 19, fig. 68.

Pinkish white, with an orange-brown band near the sutures, and a broader one below the middle of the last whorl.

Length, 5·5 mill.

Sandwich Islands.

C. reticulata, Garrett, is a synonym.

C. PRODUCTA, Pease. Pl. 19, fig. 63.

Yellowish white; sinus deep. Length, 6 mill.

Sandwich Islands.

I have not seen this species. The figure appears to represent an immature individual.

C. PUSTULOSA, Folin. Pl. 30, fig. 73.

Light fulvous, the pustules tipped with red. Length, 5 mill.

Pacific Ocean, on Meleagrina.

Digitized by Google

C. NODOSA, Folin. Pl. 30, fig. 71.
Light fulvous. Length, 4 mill.
Pacific Ocean, on Meleagrina.

Unfigured or unidentified species of Clathurella.

C. PUNGENS, Gould, C. ASPERSA, Gould. *Hong Kong.*
C. TURRICULA and C. PUNCTATA, Dunker. *Upolu.*
C. NEGLECTA, C. B. Ad. (= DESPECTA, H. and A. Ad.). *Panama.*
C. PYGMÆA, C. MACULATA, C. MINOR, C. B. Ad. *Jamaica.*
C. SECTA, Sowb. *China.*
C. RUBICUNDA, Gould (*Loo Choo*); C. FILOSA, Gould (*Ousima*); C. LACUNOSA, Gould (*Hong Kong*); C. AMPLEXA, Gould, (*Simon's Bay*); C. PEREGRINA, Gould (*Sydney, N. S. W.*).
C. HEPTAGONA, C. FUSCOLINEATA, C. FENESTRATA, Dunker. *Upolu.*
C. STREPTOPHORA (*N. Atlantic*), C. PACHIA, C. ARANEOSA, C. PUDENS, C. PERPAUXILLA, C. CIRCUMVOLUTA, C. CHARIESSA, C. HORMOPHORA (all *West Indies*), C. PERPARVA (*Pernambuco*), C. CHYTA (*Azores*), Watson.
C. EXILIS, Phil. *Red Sea.*
C. HARPA, C. ELEGANS, C. PAUCICOSTATA, C. CYLINDRICA, C. BRUNNEA, C. FUSCOMACULATA, C. BALTEATA, C. BUCCINOIDES, C. EXILIS, and C. PULCHELLA, Pease. *Sandwich Islands.*
C. GIBBERA, C. TENELLA, C. CONVEXA, C. TENERA (all *Mediterranean*), C. NODULOSA, (*Medit., Portugal*), C. EXQUISITA (*Portugal*), all of Jeffreys.
C. SUBGRANOSA (*Singapore*), C. ALTERNANS (*Hab.?*), C. RETICULOSA (*Japan*), C. ALBICAUDATA (*Persian Gulf*), C. PIPERATA (*Korea*), C. MORETONICA (*Australia*), C. CAPENSIS (*S. Africa*), C. COMMODA (*So. Africa*), C. ASPERULATA (*Japan, Persian Gulf*), C. TRIFILOSA (*Hab.?*), all of Edgar A. Smith.
C. PHILOMENA, Tenison-Woods. *Tasmania.*
C. MACLEAYI (*Australia*), C. TRICOLOR (*Australia*), C. RAMSAYI (*New Guinea*), C. BARNARDI (*Australia*), all of Brazier.
C. PAPUENSIS, Tapparone-Canefri. *New Guinea.*
C. HEXAGONA, Pfr. *Cuba.*
C. CRYSTALLINA, and C. CONSTRICTA, Gabb. *Catalina Isld., Cal.*
C. INTERCALARIS, and C. SERRATA, Carpenter. *Panama.*

Digitized by Google

Genus DAPHNELLA, Hinds.

D. LYMNEIFORMIS, Kiener. Pl. 26, figs. 60, 89, 90, 93.

Whorls with narrow, close, revolving ridges, the earlier ones with longitudinal ribs; white, irregularly maculated with chestnut, often forming longitudinal zigzag markings.

Length, 14 mill.

West Indies, *Philippines*, *Australia*.

D. decorata, C. B. Adams, is a synonym, from the West Indies, and *D. patula*, Reeve (fig. 89), another from the Philippines; the above widely separated localities appear to be well authenticated. Kiener gave the Indian Ocean and Isle of France for habitats.

Var. FRAGILIS, Reeve. Pl. 26, fig. 90.

Shell thin, fragile, transparent, very closely finely reticulated throughout with raised lines, the spiral ones the most prominent; white. Length, 23 mill.

Hab.? (Reeve); *Australia* (Angas); *Japan* (E. A. Smith).

Mr. Smith says that the Japanese form is much smaller than the type, being 10 mill. long; I suspect, however, that Reeve's figure is magnified. Mr. Smith also unites this with the type, but it may better be regarded as a variety of it.

D. CASTA, Hinds. Pl. 26, fig. 96.

Shell glassy, spirally grooved, columella twisted; faintly tinged with pink. Length, 13·5 mill.

Gulf of Nicoya, *Central America*, 23 fms. mud (Hinds).

D. VARIEGATA, Carpenter. Pl. 22, fig. 54.

Very thin, with nine ribs and almost microscopic revolving lines; yellowish or pinkish horn-color, with one or two narrow chestnut bands—sometimes interrupted. Length, 8 mill.

Sta. Barbara, *Cal.*

Figured from a specimen, one of the original lot. A variety *nitens* has a chestnut and a white band; from same locality.

D. PLUMBEA, Hinds. Pl. 21, fig. 39.

Thin, longitudinally ribbed; pale lead-color, narrowly banded with chestnut. Length, 13·5 mill.

Magdalena Bay, *L. Cal.*, 5 fms. (Hinds).

I suspect that the preceding species will prove to be synonymous with this.

Digitized by Google

D. FUSCOLIGATA, Dall. Pl. 34, fig. 95.

Strongly sculptured, longitudinally and spirally; brownish white, brown-banded at the suture, and in the middle of the body-whorl, the nodulous intersections of the sculpture frequently brown-tipped. Length, 7–8·5 mill.

Monterey and *San Diego, Cal.*

Figured from a specimen from the latter locality. The strong sculpture allies this to Clathurella.

D. BOHOLENSIS, Reeve. Pl. 26, fig. 92.

Shell without longitudinal sculpture except close growth-lines, with fine spiral striæ, some of which are more prominent than the others, forming small acute ridges; whitish, rather indistinctly waved or streaked with yellowish chestnut.

Length, 12 mill.

Philippines (Cuming); *Viti Is.* (Garrett).

D. HYALINA, Reeve. Pl. 21, fig. 33; Pl. 26, figs. 82, 86.

Thin, transparent, longitudinally very minutely and closely elevately striated throughout; whitish, encircled by distant chestnut lines, sometimes borne on striæ. Length, 14 mill.

Hab.?

Narrower than the preceding species, but may be only a variety of it.

D. VARICIFERA, Pease. Pl. 25, fig. 39.

Shell rather light, thin, closely decussated by longitudinal and spiral ridges, some of the latter much more prominent; whorls here and there somewhat indistinctly varicose; white, more or less stained and maculated with chestnut. Length, 17 mill.

Paumotus Is.

D. DELICATA, Reeve. Pl. 26, fig. 80.

Shell thin, hyaline, very closely and evenly spirally striated; white, with pale chestnut or orange-brown tessellations, interrupted by a white central band. Length, 13–22 mill.

Lord Hood's Isl. (Cuming); *Tahiti* (Garrett).

According to Mr. Garrett the unfigured *D. Philippiana*, Dunker, is the same.

Digitized by Google

D. DELICATULA, Tenison-Woods. Pl. 32, fig. 29.

Shell subdiaphanous, shining; pale yellow, slenderly and irregularly zoned with red lines. Length, 9 mill.

Tasmania.

Figured from a type specimen in the museum of the Royal Society of Tasmania.

D. FLAMMEA, Hinds. Pl. 26, fig. 78.

Spirally closely striated, lip minutely crenulated within, sinus somewhat obsolete; whitish, ornamented with waved longitudinal chestnut flames. Length, 16 mill.

New Ireland (Hinds).

D. ORNATA, Hinds. Pl. 26, fig. 88.

Cancellated with decussating striæ, sinus rather broad; pale fulvous with two revolving rows of short flames or spots of chestnut. Length, 12 mill.

New Guinea (Hinds); *Darnley Isl., N. Australia* (Brazier).

D. MARMORATA, Hinds. Pl. 26, fig. 95.

Whorls flatly angulated around the upper part, elegantly cancellated with transverse and longitudinal striæ, columella striated at the base; whitish, longitudinally zigzag marbled with chestnut. Length, 8 mill.

New Guinea (Hinds); *Darnley I., Australia* (Brazier).

Reeve changed the name to *Daphnelloides* because of *Pl. marmorata*, Lam.; the latter is, however, a true Pleurotoma.

D. AUREOLA, Reeve. Pl. 26, fig. 77.

Thin, transparent, spirally ridged, longitudinally very finely closely striated; lip crenulated within, sinus small, distinct; pale golden color. Length, 21 mill.

Isl. of Luzon, Philippines (Cuming).

"A delicate shell of so bright a hyaline texture that the pillar of the lip may be seen throughout." I have doubts of its distinctness from *D. flammea.*

D. IGNIFLUA, Reeve. Pl. 20, fig. 6.

Spirally very closely elevately striated, longitudinally ribbed, ribs rather broad, approximated, conspicuous towards the apex,

Digitized by Google

obsolete towards the base; lip crenulated within, sinus superficial; whitish, ornamented with waved fulvous orange flames.

Length, 14 mill.

Hab. unknown.

D. SATURATA, Reeve. Pl. 26, fig. 75.

Granosely reticulated with raised striæ; lip finely crenulated, sinus distinct; deep bright brown within and without, ornamented with rather distant longitudinal white markings, and a white band revolving upon the middle of the body-whorl.

Length, 14 mill.

Isl. of Corrigidor, Philippines, coarse sand, 7 fms. (Cuming).

D. FUSIFORMIS, Garrett. Pl. 27, fig. 15.

Longitudinally ribbed on the spire, ribs obsolete on the body-whorl, where there are several minute periodical varices, with unequal, more or less crenulated revolving ridges; lip very finely crenulated, sinus small; white, faintly tinged with yellowish brown. Length, 8 mill.

Paumotus.

I think it not improbable that this is an extreme form of a young *Clathurella tricarinata*, Reeve.

D. MILLEGRANA, Garrett. Pl. 27, fig. 2.

Whole surface minutely granularly decussated; lip delicately crenulated, sinus large and deep; white, with short transverse ferruginous lines and dots. Length, 9 mill.

Paumotus.

D. TESSELLATA, Garrett. Pl. 27, fig. 1.

Very finely, minutely granularly decussated throughout; lip finely crenulated, sinus large and deep, slightly sinuous also near the base; white, tessellated with three spiral rows of small, subquadrangular chestnut spots, one row of which appears on the spire. Length, 10 mill.

Paumotus Is.

D. VITREA, Garrett. Pl. 25, fig. 57.

Shell thin, vitreous, subpellucid; whorls eight, obtusely narrowly shouldered above, covered by fine spiral striæ, upper whorls longitudinally ribbed, each whorl with two slight periodical varices; lip finely crenulated, slightly varicose externally, sinus large and deep; white. Length, 8 mill.

Paumotus Is.

Digitized by Google

D. CRENULATA, Pease. Pl. 25, fig. 55.

White, spirally finely ridged, the interstices striated, longitudinally faintly and obsoletely irregularly ribbed; sutures bordered on each side by a crenulated rib, the crenulations connected obliquely by a short ridge; sinus broad and deep.

Length, 7 mill.

Central Polynesia.

D. AXIS, Reeve. Pl. 26, fig. 85.

Whorls two-keeled round the upper part, spirally faintly ridged beneath; sinus very deep; whitish, somewhat indistinctly stained with orange-brown. Length, 23 mill.

Philippines (Cuming).

D. CURTA, Pease. Pl. 27, fig. 16.

Strongly decussately granular, white. Length, 4·5 mill.

Paumotus Is.

D. INQUINATA, Reeve. Pl. 26, fig. 98.

Shell spirally ridged, closely longitudinally striated, sinus deep; whitish, stained here and there with orange-brown.

Length, 9 mill.

Philippines.

D. PLURICARINATA, Reeve. Pl. 26, fig. 81.

Shell encircled by numerous sharp keels, the interstices longitudinally striate, sinus rather large; whitish, stained with streaks of orange-brown. Length, 7·5 mill.

Philippines.

Very closely allied to *D. axis*, Reeve, but only one-third the size of the figure of that species, if the latter be not magnified.

D. TICAONICA, Reeve. Pl. 26, fig. 84.

Whorls rather ventricose, spirally irregularly ridged, interstices between the ridges very minutely latticed, sinus small; whitish, flamed here and there with orange-brown.

Length, 12 mill.

Philippines.

The figure of the above species exhibits some slight peculiarities, yet I suspect that all the forms having similar carinated sculpture and flamed coloring should be referred to one species.

Digitized by Google

D. TRIVARICOSA, Martens. Pl. 25, fig. 54.

Shell with four or five revolving ridges on the body-whorl, with intermediate close revolving striæ, no longitudinal ribs except on the upper whorls of the spire, subcontinuously three-varicose; light yellowish white. Length, 15 mill.

Mauritius.

D. VARICOSA, Souverbie. Pl. 27, fig. 5.

Shell finely reticulated by growth and revolving striæ, with larger spiral liræ, crossed by non-continuous varices; yellowish white, with minute white markings on the spiral ridges, and a large brown spot on the back of the body-whorl—apparent also within the aperture. Length, 12 mill.

New Caledonia.

D. DENTATA, Souverbie. Pl. 25, fig. 41.

Smooth, with fine spiral striæ, more apparent towards the base of the body-whorl; thin, translucent, yellowish white, with irregular revolving series of milk-white spots, and a more regular subsutural series; lip slightly toothed, sinus narrow, shallow, sutural. Length, 31 mill.

New Caledonia.

A very distinct, somewhat aberrant form, of which only one specimen was obtained.

D. ÆGROTA, Reeve. Pl. 26, fig. 87.

Shell thin, finely decussated throughout; whitish.
Length, 11 mill.

Singapore, fine sand, 7 fms. (Cuming).

D. CREBRIPLICATA, Reeve. Pl. 26, fig. 94.

Shell cancellated by close longitudinal ribs and spiral ridges; white, profusely variegated with rich orange-brown.
Length, 16 mill.

Philippines, under stones at low-water (Cuming);
Port Jackson, *Australia* (Angas).

D. REEVEANA, Tryon. Pl. 23, fig. 81.

Narrowly and very distantly longitudinally ribbed, spirally finely striate; fleshy brown, obsurely banded, ribs whitish.
Length, 12 mill.

Habitat unknown.

This is *D. casta*, Reeve, not Hinds.

Digitized by Google

D. OLYRA, Reeve. Pl. 26, fig. 97.

Thin, somewhat transparent, spire short; smooth or obsoletely striated; snowy white, apex rose-color. Length, 12 mill.

Habitat unknown.

This may be a worn specimen of the next species, which, if so, will become a synonym.

D. COMPTA, Ad. and Angas. Pl. 25, fig. 49.

Spire and upper part of body-whorl longitudinally plicate, crossed by fine close revolving lines, lip acute, unarmed, widely but not deeply sinuous behind; light yellowish or whitish, maculated more or less with chestnut. Length, 12 mill.

S. Australia.

Described as a Cithara, and the lip said to be externally varicose, but in the specimens before me the lip, although thick except on its edge, shows no varix, and none would be anticipated on a shell of this character. A shell sent to me from Tasmania as representing the unfigured *D. varix*, Tenison-Woods, appears to belong to this species, and judging from the description it must be either a synonym or very closely allied.

D. URNULA, Reeve. Pl. 23, fig. 97.

Ventricose, longitudinally ribbed, spirally elevately striated; chestnut-brown. Length, 5 mill.

Habitat unknown.

"A curious little ventricose shell which seems scarcely to have arrived at maturity."

Unfigured species, probably belonging to Daphnella.

D. LEUCOPHLEGMA, Dall (Caribbæan), D. LIMACINA, Dall (Caribbæan [Dall], *Martha's Vineyard, Mass.* [Verrill]).

D. CLATHRATA, Gabb. *Catalina Id., Cal.*

D. EFFUSA, Carpenter. *Neeah Bay.*

D. MAGELLANICA, Phil. *Straits of Magellan.*

D. CANCELLATA, Hutton. *New Zealand.*

D. KINGENSIS, Petterd. *King's Id., Bass Straits.*

D. PURA, Gould (Hong Kong); D. CONCINNA, Gould (*Loo Choo*); D. DELUTA, Gould (*China Seas*).

D. TASMANICA, D. IMMACULATA, D. HARRISONI (Tenison-Woods). *Tasmania.*

Digitized by Google

D. INCINCTA, Watson (Azores); D. COMPSA, Watson (*Fiji Is.*); D. AULACOESSA, Watson (*between Cape York, Australia, and New Guinea*).

D. SANDWICENSIS, D. MACULOSA, D. INTERRUPTA, Pease.

Sandwich Isles.

D. GEALEI, D. TENUICLATHRATA, D. TENELLA, Smith.

Habitat unknown.

D. BUTLERI, Smith (*Philippines*); D. SUPERCOSTATA, Smith (*Japan*); D. SOUVERBIEI, Smith (*W. Australia*); D. MACANDREWI, Smith (*Persian Gulf*).

Section RAPHITOMA, Bellardi.

D. NUPERRIMA, Tiberi. Pl. 22, fig. 49.

Rather thin, with about twelve distant, small longitudinal riblets, crossed by distant raised lines. Length, 12 mill.

Mediterranean Sea, rare.

It is *D. decussata*, Phil., and several authors have also referred it to the *Pl. hispidula*, Jan; but that fossil form has the spiral sculpture more prominent.

D. NEBULA, Montagu. Pl. 21, figs. 20, 11; Pl. 33, fig. 56; Pl. 30, fig. 86.

Longitudinally ribbed, crossed by spiral striæ; sinus broad and shallow; chestnut or horny brown, interior similarly colored. Length, 12 mill.

Norway, Mediterranean, Canary Is., W. Coast of Africa.

The following forms or varieties have been distinguished:

Var. GINNANNIA, Risso. Ribs larger and stronger, yet the revolving sculpture is well marked. Mostly Mediterranean. This is not the *P. Ginnannia* of Reeve's Iconica.

Var. LÆVIGATA, Phil. (fig. 11). Elongated, with the ribs not so prominent, and sometimes nearly obsolete, the revolving striæ faint. Reeve's figure, which I have copied, is inaccurate, as it ought to show some traces of longitudinal ribs; it is magnified three times. Jeffrey's figure (Pl. 33, fig. 66) represents a transitional form.

Var. COSTULATA, Risso. Ribs narrower, continuing to the base of the body-whorl.

Digitized by Google

Var. ELONGATA, Jeffreys. Elongated, larger than the type.

Var. PALLIDA, Monts. Yellowish white.

Var. RUFULA, Monts. Reddish chestnut.

Var. FASCIATA, Monts. Yellowish, with a chestnut zone. (= lævigata).

Var. MEDIOFASCIATA, Maltzan. Pl. 30, fig. 86.

D. FUSCATA, Desh., is possibly a variety.

D. BRACHYSTOMA, Phil. Pl. 22, fig. 45; Pl. 21, fig. 21; Pl. 18, fig. 45.

Slightly, narrowly shouldered, with 7–9 narrow ribs extending from the shoulder to the base, and wider interspaces; whole surface covered with revolving striæ; yellowish white, orange or occasionally deep reddish brown, paler specimens sometimes indistinctly brown-banded below the periphery.

Length, 6–8 mill.

Europe.

The synonymy includes *D. Cycladensis*, Forbes (t. 21, f. 21), *D. granulifera*, Brugn., *D. tiarula*, Loven, and perhaps *D. Forbesii*, Reeve (Pl. 18, fig. 45).

D. TURGIDA, Forbes. Pl. 21, figs. 25, 29, 7.

Longitudinal ribs few, strong, rounded, wider than the interstices, crossed by revolving lines, ribs disappearing towards the base of the body-whorl; chocolate-brown. Length, 7·5 mill.

Mediterranean Sea, W. Africa.

The synonymy includes *D. nana*, Scacchi, not Desh.—the latter a fossil form, *D. fortis*, Forbes (fig. 29), *D. Ægeensis*, Forbes (fig. 7).

D. ATTENUATA, Montagu. Pl. 21, fig. 24.

Ribs nine, narrow, flexuous, with wider interspaces, spirally slightly and finely striate; pale tawny, the upper part and middle of the body-whorl often banded, or the lower half of the body-whorl darker-colored, sometimes there are several narrow revolving chestnut lines. Length, 12–15 mill.

Europe, Teneriffe.

Several authors have referred *Murex aciculatus*, Lam., to this species, but I believe it to be an Ocinebra. *D. Villiersii*,

Digitized by Google

Michaud, *D. gracilis*, Scacchi, *D. Payraudeauti*, Weinkauff (not Deshayes), and perhaps *D. Bivonæ* and *D. Valenciennesii*, Maravigna, and *D. vulpina*, Bivona, are also referred to this species.

D. COSTULATA, Blainv. Pl. 21, figs. 19, 23.

Narrowly but distinctly shouldered, ribs 9–10, crossed by fine revolving lines, which are almost microscopic; buff or pale yellow, sometimes with a chestnut band on the periphery, or below the suture, or with several narrower bands.

Length, 12–15 mill.

Europe, Madeira.

The synonyms are *D. striolata*, Scacchi (fig. 19), *D. Lœviana*, Forbes (fig. 23), *D. Smithii*, Forbes, *D. elegans*, Brown, *D. Farranii*, Thompson, and possibly *D. fenestrata*, Desh., *D. Steveni*, Krynicki, and *D. costulata*, Cantraine. The latter was supposed identical with *Columbella Haliæeti*, Jeffreys (Manual, v, 160, t. 56, f. 77), with which opinion that author himself agreed, until recently (Zool. Proc., 392, 1883)—when he refers it to the present species.

D. SEMICOLON, S. Wood. Pl. 4, fig. 56.

Strongly shouldered, forming a carinated and tuberculated periphery, with well-marked sculpture. Length, 10 mill.

Mediterranean, Shetland Islands, North Sea.

Reported in a recent state by Dr. Jeffreys, from the above localities, under the name of *D. galerita*, Phil. (figured), but that species, a Sicilian fossil, appears to differ. The figure given by Jeffreys corresponds with that of *D. semicolon*, in Wood's Crag Mollusca sufficiently to justify Monterosato in uniting the two species.

D. MINUTA, Forbes. Pl. 21, fig. 16.

Shell strongly ribbed, distantly spirally striate; reddish brown. Length, 5 mill.

Ægean Sea.

Perhaps a variety of *D. turgida*, Forbes.

D. ABYSSICOLA, Forbes. Pl. 21, fig. 15.

Ribs strong, crossed by rather distant raised striæ; chocolate-brown. Length, 4 mill.

Ægean Sea.

Digitized by Google

D. SENEGALENSIS, Maltzan. Pl. 30, fig. 89.

Shell with ten, straight, subcompressed ribs, finely reticulated; spire subturreted, with impressed sutures; lip acute, the sinus slightly emarginated; brownish, lower part of body-whorl yellowish white. Length, 5 mill.

Isl. Goree, W. Coast of Africa.

✓ D. CERINA, Kurtz and Stimpson. Pl. 22, fig. 43; Pl. 34, fig. 100.

Yellowish white, columella sometimes tinged with black; surface covered by very fine revolving lines crossing the ribs. Length, 7 mill.

New England to *Tampa Bay, Fla.*, mostly Southern in distribution.

D. atrostyla, Dall, MS. (Pl. 34, fig. 100), is a slight variety, with dark columella, from W. Coast of Florida.

D. CARPENTERI, Verrill and Smith. Pl. 13, fig. 62.

Scarcely shouldered, with about twelve short flexuous longitudinal ribs and no spiral sculpture; white or pale yellow, often with darker brownish yellow ribs. Length, 7 mill.

New England.

✓ D. ACCINCTA, Montagu. Pl. 18, fig. 37.

Shell slightly shouldered, longitudinally obliquely ribbed, very closely spirally striated; white, with sometimes an orange-brown band below the periphery. Length, 7 mill.

West Indies.

Described by Montagu as British—an error repeated by Reeve, where *D. Forthiensis* is assigned to the Frith of Forth.

D. INTERFOSSA, Carpenter. Pl. 22, fig. 57.

Scarcely, very narrowly shouldered, with about fifteen narrow longitudinal ribs, separated by wider interspaces, and the same number of spiral liræ, forming subquadrangular pits between the sculpture; reddish brown. Length, 10 mill.

Vancouver's Isl.

Figured from a small specimen.

D. FUNEBRALE, Dall.

Reddish black, slender, acuminate; whorls 7–8, rather rounded; aperture elongate, narrow, canal short, slightly recurved; inner lip and columella smooth; sinus almost imperceptible; sculpture

Digitized by Google

of fine rounded grooves, about fifteen on the body-whorl, separating evenly rounded ridges about twice as broad as the grooves; these are crossed by about twelve longitudinal rounded ribs, obsolete anteriorly. Length, ·46 inch.

Sitka, Alaska.

Described from a single specimen and referred to Mangilia with doubt. Not figured.

D. POLITA, Hinds. Pl. 20, fig. 97.

White, polished, angularly ribbed, seven-sided, lip simple, sinus small. Length, 16 mill.

Straits of Macassar, coarse sand, 7 fms. (Hinds).

D. FULGURANS, Krauss. Pl. 22, fig. 59.

With about eleven narrow longitudinal ribs, short on the body-whorl, with revolving striæ towards the base; sinus scarcely apparent; white, with angular chestnut markings. Length, 6 mill.

Cape of Good Hope; in the byssus of Pinna.

D. ÆRUGINOSA, Reeve. Pl. 23, fig. 100.

Longitudinally ribbed, the interstices with very minute spiral striæ; yellowish white, with a sutural chestnut line, more or less interrupted, a middle line on the body-whorl, interrupted by the ribs, below which the whorl is often stained a darker color, and sometimes an inferior interrupted chestnut line. Length, 10 mill.

Hab. unknown (Reeve); *Indian Ocean?*

D. PESSULATA, Reeve. Pl. 21, figs. 36, 37.

Ribs more or less distant, crossed by somewhat obsolete spiral striæ; lip thin, sinus small; yellowish or ash-color.

Length, 12–15 mill.

Philippines (Cuming); *Australia* (Brazier).

D. VINCENTINA, Crosse. Pl. 17, fig. 91.

Ribs narrow, distant, crossed by distant spiral liræ, which become more crowded towards the base; sinus shallow; light yellowish brown. Length, 7 mill.

Gulf of St. Vincent, Australia.

D. JACKSONENSIS, Angas. Pl. 22, fig. 73.

With somewhat prominent longitudinal ribs, slightly nodulous at the angle of the shoulder, the interstices crossed by narrow

Digitized by Google

grooved lines in pairs; sinus very shallow, pale fulvous yellow. Length, 14 mill.

Port Jackson, Australia.

Unfigured species of the section Raphitoma.

D. CALCARATA, Grat. (D. ETRUSCA, Tiberi). *Mediterranean Sea.* Probably exotic, according to Monterosato.

D. NODULOSA, Jeffreys; D. FUSIFORMIS, Requien; both Mediterranean.

D. LITHOCOLLETA, D. LINCTA, Watson. *West Indies.*

D. IPARA, D. COMATROPIS, D. BANDELLA, D. ANTONIA, D. POURTALESII, D. COLUMBELLA, D. PELAGIA, D. LISSOTROPIS, Dall. *Caribbæan Sea.*

D. TABULATA, D. CREBRICOSTATA, D. ANGULATA, Carpenter. *W. Coast U. S.*

D. DEMPSTA, Gould. *China Seas.*

D. ALTERNATA, D. ST. GALLÆ, and Var. BENEDICTI, Tenison-Woods. *Tasmania.*

Section BELLARDIELLA, Fischer.

D. GRACILIS, Mont. Pl. 18, fig. 38.

Whorls very narrowly, concavely shouldered below the sutures, with curved longitudinal ribs crossed by fine, close revolving striæ; pale yellowish brown, with a narrow lighter central band, sometimes bordered by a chestnut band on the lower side.

Length, 25 mill.

Europe, Canary Islands.

Body white, closely but irregularly speckled with pink and flake-white; pallial tube somewhat extensile, usually short; head bulbous; tentacles extremely short—mere points above the eyes, below the eyes they are cylindrical and stout; eyes proportionally large, on long stalks conjoined with the tentacles; foot rounded in front, with small angular corners, pointed behind.

It is *D. emarginata*, Donovan; *D. oblonga*, Brocchi; *D. Comarmondi*, Michaud; *D. suturalis*, Bronn; *D. pelorius*, Chier.; *D. sinuosa*, Couch; *D. Branscombi*, Clark; and *D. fallax*, Forbes—the two latter juveniles.

Digitized by Google

Section TERES, Bucq., Dautz. et Dollf.

D. ANCEPS, Eichwald. Pl. 18, fig. 39; Pl. 32, fig. 31.

Shell encircled by spiral ridges, of which there are from 20 to 25 on the body-whorl, frequently alternately larger and smaller; light yellowish brown, usually irregularly spotted with chestnut, forming interrupted longitudinal streaks. Length, 8–15 mill.

Norway to *Mediterranean*, *Madeira* and *Canaries*.

Var. CONCOLOR is without the chestnut spots.

The synonymy includes *D. teres*, Forbes, a name under which it is perhaps more extensively known. Reeve's figure of *teres* (Pl. 18, f. 39) being very bad, I add another, from Forbes and Hanley (Pl. 32, f. 31). Other synonyms are *D. La Viæ*, Calcara; *D. borealis*, Lovén; *D. fusiformis*, Requien; *D. polyzonatum*, Brugnone, and *D. Barbieri*, Brusina.

D. AMŒNA, Sars. Pl. 20, fig. 86.

Shell thin, pellucid, interstices of the revolving ridges longitudinally striate, lip-sinus profound; light brownish.

Length, 8 mill.

Arctic Norway.

Section ZAFRA, A. Adams.

There appears to be much uncertainty as to the limits of this group. Adams himself includes the West Indian minute Clathurellæ discovered by d'Orbigny and figured by Reeve on Pl. 39 of the Conch. Icon., although they do not appear to me to possess any characters apart from ordinary Clathurellæ. As will be seen below, there are differences of opinion as to some of the other species.

D. MITRÆFORMIS, A. Adams.

Whorls six-and-a-half, rather flat, longitudinally ribbed, the plicæ somewhat distant, oblique; last whorl constricted in front and obliquely sulcate; white, with an obscure chestnut band at the sutures, the last whorl with a narrow chestnut band on the periphery, and chestnut-tinted at the base.

Japan.

Not figured.

Columbella zonata, Gould (Manual, v, 172), also unfigured, is doubtfully referred here by Mr. E. A. Smith. If identical, it has priority of two months in publication.

Digitized by Google

D. SUBVITREA, Smith. Pl. 34, fig. 83.

Ribs about eleven, disappearing a little below the middle of the body-whorl, the lower extremity of which is obliquely five or six striate, the two or three uppermost striæ wider apart than the rest; subpellucid, white, with a thin indistinct brown line, interrupted by the costæ around the lower part of the whorls, and a transparent pellucid zone at the top, with a second band or series of short flames just below the middle of the last whorl, which is stained with brown at the extremity. L. 4, width 1·5 mill.

Japan.

Dunker (Index Moll. Mar. Japan, 26) refers this shell to Columbella—in which I think he is correct.

D. POLITA, G. and H. Nevill.

Smooth, white, with two bands of irregular opaque white flakes on each whorl, four on the last. Length, 3·5 mill.

Mauritius.

Described as a Zafra, but I think it may be referred to Columbella. If a Pleurotomid the specific name will need to be changed.

D. SEMISCULPTA, G. and H. Nevill. Pl. 34, figs. 14, 15.

Ribs about twice as broad as their interstices (represented as narrower on the figures), obsolete on the back of the last whorl, which is transversely striated at its base; outer lip scarcely thickened or reflected, not as long as the columella, slightly emarginate at junction with the last whorl; horny brown throughout. Length, 3 mill.

Burmah.

Appears to me to be an Anachis, in Columbellidæ, although described as a Zafra.

D. PUPOIDEA, H. Adams. Pl. 34, fig. 92.

Numerously longitudinally ribbed, sinus short and wide; white, with a broad chestnut band below the periphery, and tinged with chestnut at the base. Length, 7 mill.

New Hebrides.

Digitized by Google

Section THESBIA, Jeffreys.

D. NANA, Loven. Pl. 32, fig. 28.

Encircled by numerous punctate impressed lines; milk-white. Length, 6 mill.

Northern Europe—Arctic.

Dr. Jeffreys (Brit. Conch., iv, 359) refers to this species *Columbella rosacea*, Gould (Manual, v, 160), a shell which does not appear to me to be nearly related to it.

Unfigured Species of Section Thesbia.

The following are described by Rev. R. Boog Watson:

D. TRANSLUCIDA (*Kerguelen Isl.*), D. ERITIMA (*Tristao da Cunha*), D. CORPULENTA (*Kerguelen Isl.*), D. PLATAMODES (*ditto*), D. PAPYRACEA (*ditto*), D. PRUINA (*Azores*), D. MONOCEROS (*S. W. of Sierra Leone*), D. DYSCRITA (*St. Thomas, W. I.*), D. BRYCHIA (*Lat. 1° 47′ N., long. 24° 26′ W., Mid-Atlantic*, 1850 fms.).

Section TARANIS, Jeffreys, 1870.

D. MORCHI, Malm. Pl. 29, fig. 66.

Periphery strongly, tubercularly angled, the shoulder above it sloping, below the periphery there are several raised cinguli forming inferior carinations, crossed throughout by flexuous, narrow longitudinal plications; whitish. Length, 4·5 mill.

Norway to Mediterranean Sea; off Newport, R. I., 365 fms. (Verrill); *Gulf of Mexico*, 805 fms. (Dall).

It is *Pleurotoma demersum*, Brugnone (not Bellardi), and *Bela demersa*, Tiberi.

D. PULCHELLA, Verrill. Pl. 29, fig. 63.

A smaller species than the preceding, not so sharply angulated, the carinæ sharp but not nodulous, those on the body-whorl six in number, besides one or two on the canal.

Length, 2·20 mill.

Off Martha's Vineyard, 487 fms., one specimen.

Dr. Dall thinks this may be included in the preceding species, as European specimens of *D. Morchi* sent to him by Dr. Jeffreys and Prof. Sars, appear to agree with it pretty well.

Digitized by Google

D. TURRITISPIRA, E. A. Smith (unfigured). *Japan.*

D. LÆVISCULPTA, Monterosato (unfigured). *Mediterranean Sea.*

Section PLEUROTOMELLA, Verrill, 1872.

D. PACKARDII, Verrill. Pl. 29, fig. 59.

Spiral striæ faint or strong, the ribs low and narrow; pale yellowish brown or salmon, the nucleus darker.

Length, 21·5 mill.

Gulf of Maine (85–110 fms.); *off Cape Cod, Mass.* (96 fms.).

D. AGASSIZII, Verrill and Smith. Pl. 29, fig. 58.

More solid and rugosely sculptured than the preceding species; sinus wide, rather deep, rounded, a little below the suture; usually white when fresh, sometimes pink or pale yellow, often stained with dark ash-gray; columella often white, but usually tinged with brown. Length, 31 mill.

Off Newport, R. I., and *S. of Martha's Vineyard; off Delaware Bay*, 65 to 500 fms.

D. PANDIONIS, Verrill. Pl. 29, fig. 62.

Waxy white, tinged with pale orange-brown, with a faint white band on the middle of the body-whorl, and another below the suture, sometimes stained gray or brown. Length, 43 mill.

Martha's Vineyard; 238–312 fms.

D. VERRILLII, Dall (unfigured). 860 fms., *Caribbæan.*

D. SIGSBEI, Dall (unfigured). 640–1568 fms., *Caribbæan.*

D. CIRCINATA, Dall. Pl. 6, fig. 76.

Shell slender, elongate, covered with a brownish epidermis; whorls six, evenly rounded, but with a sharp carina, above which they are smooth, whilst below it they are grooved, with wider interspaces; notch deep, about one-third of the way from the carina to the suture. L. 3 inches, diam. 1 inch.

Alaska.

Described as a Surcula from a dead specimen found on the beach at Nateekin Bay, Unalashka. The subsequently described, but unfigured *Pl. insignis*, Jeffreys, of which ten living specimens were obtained by the Vega Expedition in the Siberian Sea, appears to be a synonym. These had no operculum; therefore

Digitized by Google

the species cannot be a Surcula. I place it here temporarily, but it is not unlikely that a new group, perhaps a genus, will need to be made for it.

Section MITROMORPHA, A. Ad., 1865.

D. FILOSA, Carpenter. Pl. 25, fig. 63.

Equally spirally lirate throughout, lip scarcely sinuous, with about a dozen minute internal denticles; purple-black, or chocolate-color, without and within. Length, 5–6 mill.

So. California, Lower California.

D. ASPERA, Carpenter. Pl. 25, figs. 61, 62.

Spirally lirate and longitudinally closely costulate, the intersections forming a roughly asperated surface; reddish brown. Length, 3–5 mill.

S. California, Lower California.

Var. GRACILIOR, Hemphill. Fig. 62.

Decussation not so deep, so that the surface is smoother, the tuberculation smaller; sometimes the clathration of the body-whorl is only seen on the upper portion, the longitudinal costulæ becoming obsolete below. Length, 4–5 mill.

D. EFFUSA, Carpenter.

Shell graceful, much effused, reddish brown; whorls narrow, elongate, sutures impressed; spirally striate, decussated by growth-lines; lip thin, scarcely sinuate; reddish brown.

L. 15·5 mill, diam. 5·5 mill.

Neeah Bay, Washington Terr.

Described from a single broken specimen (not figured).

D. LIRATA, A. Adams.

Shell whitish or light brownish, mitriform, acuminated below, spire and aperture of equal length; normal whorls five, convex, transversely lirate, the liræ about equal and equidistant; aperture narrow, columella arcuately truncate, with an anterior inconspicuous plication, lip smooth within, margin crenulated.

Japan.

"A variety or allied species has the whorls longitudinally plicate, and some of the transverse liræ corrugate or undulated." No figure; dimensions not given.

D. FLORIDANA, Dall. Pl. 34, fig. 12.

Cancellated by longitudinal and spiral sculpture, the intersections nodulous, suture distinct, not channeled, outer lip thick,

Digitized by Google

lirate posteriorly, inner lip transversely quadriplicate, the posterior plait strongest; chocolate-colored. Length, 6 mill.

Key West, Fla., on the reefs at low-tide.

I figure this to complete the list of Mitromorpha, although Dr. Dall describes it as a Mitra, with a queried reference to Mitromorpha. I doubt its pertinence to the group, as it appears to me to have the facies of a true Mitra.

D. DORMITOR, Sowerby. Pl. 27, fig. 23.

Dr. P. P. Carpenter says (Ann. Mag. Nat. Hist. xv, 182, 1865), "M. Crosse suggests that *Columbella dormitor*, Sby., may be congeneric (with Mitromorpha)." I think it is a true Columbella.

Inhabits *Caribbæan Sea.*

CRONIA ANOMALA, Angas (Manual, II, Purpurinæ).

Prof. Tate believes this to be a Mangilia. I cannot agree with him.

Genus HALIA, Risso, 1826.

✓ H. PRIAMUS, Meuschen. Pl. 31, fig. 1.

Rather thin, smooth; yellowish brown, sprinkled, except on the upper part of the whorls, with distant square or long chestnut spots, which sometimes have band-like regularity.

Length, 3 inches.

Bay of Cadiz.

It is *Priamus stercus-pulicum*, Chemn., *Buccinum ficus*, Martyn, *Priam agathine*, Chenu, *Bulla helicoides*, Brocchi, *Achatina maculata*, Swainson, *Helix priapus*, Gmelin.

HALIA FLEMINGIANA, Macgillivray.

This = fry of *Buccinum Dalei*, Sowb. (Manual, iii).

Unidentified and Unfigured Species of Pleurotomidæ.

Of the following names and descriptions most may be considered obsolete, and not worth the trouble of group-division, others, of more recent date, I cannot place for want of illustrations:

P. TENUIS, P. SEMINUDA, P. SUBULATA, P. RUSTICA, P. OBLIQUA, P. MENKEI, P. ISABELLA, P. ELONGATA, P. ELONGATULA, P. FUSIFORMIS, P. FERRUGINEA, P. FUNICULUS, P. CHEMNITZII, P. CERITHINA, P. CORNEA, P. COCCINEA, P. CURVATA, P. ATRATA, all of Anton, and without localities.

Digitized by Google

P. PERLATA, Lesson. *Sandwich Isles.*
P. GRACILIS, Marrat. *West Africa.*
PL. SUBULATA, Menke.
PL. NIVEA, Phil. (*Formosa*); PL. VESTALIS, Phil. (*Hab.?*).
PL. LYRATUM, Pfeiffer (Gmelin). ? = Lyria.
PL. ADUSTA, Sowb. *Monte Christi, W. Columbia.*
CAILLIAUDI (CONUS), Jay. Pl. 34, fig. 13.
Hab. unknown.

Looks something like a Conorbis, but is more probably an immature Strombus; notwithstanding its sinus, it can scarcely be a Pleurotoma.

PL. VANCOUVERENSIS (*Vancouver's Isl.*), PL. ALBATA (*Persian Gulf*), PL. SEXCOSTATA (*Singapore*), PL. RUBROAPICATA (*Japan*), of E. A. Smith.
PL. INSCULPTA, Mighels. *Key West, Fla.*
PL. MICANS, PL. CRASSILABRUM, PL. SINUOSA, PL. TODILLA, PL. OBNUBILA, PL. CIRCUMSECTA, Mighels. *Sandwich Islands.*
PL. AUGUSTÆ, PL. FUSCOCINCTA, PL. FUSIFORMIS, PL. FLAVOCINCTA, PL. ALBOMACULATA, PL. ELATIOR, PL. ALBIDA, PL. ALBELLA, C. B. Adams. *Jamaica.*

Appendix.

PLEUROTOMA YEDDOËNSIS, Jousseaume. Pl. 34, fig. 7.

A Japanese form, recently described and figured, which will, I think, prove synonymous with *P. grandis*, Gray.

DRILLIA HEMPHILLI, Stearns. Page 185.
For inches read millimetres.

DRILLIA MAKIMONOS, Jousseaume. Pl. 34, fig. 10.

Whorls closely spirally sulcate, the interstices slightly striated; white, with large longitudinal yellowish maculations.
Length, 25 mill.
Japan.

D. POULOENSIS, Jousseaume. Pl. 34, fig. 11.

Shell brown, spirally lirate; outer lip crenulate, with a slight sinus. Length, 20 mill. *Malacca.*
Described from a single specimen.

D. CLEVEI, Jousseaume. Pl. 34, fig. 9.

Shell spirally costate; white, fasciate with light brown; outer

Digitized by Google

lip crenulate, ridged within, with a shallow, wide sinus; columellar lip with a median callosity. Length, 9 mill.

Ceylon.

Described from a single specimen.

D. BELLARDI, Jousseaume. Pl. 34, fig. 8.

Shell white, spirally costate; outer lip crenulated, with a shallow sinus near the suture; columellar lip with a median plication. Length, 11 mill.

Hab. unknown.

The above three species are, judging from the figures, described from immature and imperfect, possibly water-worn specimens, so that it is not easy to compare them with previously described species. There are a number of spirally ribbed species described by Smith and older authors to which these may be approximated, but in the absence of material, no definite result is practicable. The practice of describing unique and imperfect specimens cannot be too strongly condemned. Desire for scientific renown will continue to enlarge our synonymy, until some method can be devised, by which no man's ambition can possibly be gratified in the making of generic and specific names. Although Dr. Jousseaume has furnished the text of this sermon, it is not intended to signalize him as a principal offender; much greater men—in fact the greatest conchologists are equally in fault in their desire to write *nobis* as frequently as possible.

DRILLIA LIMONITELLA, Dall. Pl. 34, fig. 6.

Small, thin, translucent, lemon-yellow, very faintly narrowly brown-banded on the periphery and below it on some specimens, the columella also brown-tinged; whorls turreted, nodulated at the periphery by about a dozen ribs, which extend across the shoulder to the suture, spiral sculpture very fine and close; outer lip slightly thickened, with a distinct, rather broad, shallow sinus. Length, 6·75 mill.

Cedar Keys, Fla., on mud flats between tides (Hemphill).

COLUMBARIUM PAGODOIDES, Watson.

This species, recently described as a Fusus, is probably only a variety of *C. Pagoda*, Lesson. It is unfigured.

Off Sydney, N. S. W.

Digitized by Google

INDEX AND SYNONYMY.

PLEUROTOMIDÆ.

PAGE.

Abbreviata (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 182, ... 167
Abyssicola (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 62, 260
Abyssicola (Pleurotoma), Forbes. Reeve, Icon., sp. 157, 1844, ... 309
Acanthodes (Mangilia), Watson. Jour. Linn. Soc., xv, 433, 1881, ... 249
Accincta (Daphnella), Montagu. Test. Brit. Suppl., 114, . 310
Aculeiformis (Pusionella), Lam. Hist. Nat., Ed. ii, ix, 461, 234
Acuminata (Drillia), Migh. Proc. Bost. Soc. N. H., 1848, p. 23, ... 190
Acuta (Bela), var. of concinnula, Verrill. Trans. Conn. Ac., v, p. 470. = B. concinnula, Verrill, . . . 221
Acuta (Pleurotoma), Bellardi (1842).
= Spirotropis carinata, Phil.
Acutangulus (Mangilia), Smith. Ann. Mag. N. H., 1882, 218, 261
Acuticostata (Mangilia), Cpt. Proc. Zool. Soc., 1856, p. 162. Mazat. Cat., 400; 2d Report, 36, 184.
= M. neglecta, C. B. Adams.
Acutigemmata (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 1877, p. 489. = P. jubata, Hinds.
Adusta (Pleurotoma), Sowb. Proc. Zool. Soc., 1833, p. 137, 319
Ægeensis (Pleurotoma), Forbes. Reeve, Conch. Icon., f. 164, 1844. = D. turgida, Forbes, ... 308
Ægrota (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 117, 305
Æmula (Drillia), Angas. Proc. Zool. Soc., 1877, p. 36, pl. v, fig. 9. = D. Traillii, Hutton.
Æqualis (Pleurotoma), Jeffreys. Brit. Conch., iv, p. 369.
= M. linearis, Mont., var. 277
Æruginosa (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 115, ... 311
Affinis (Clathurella), Dall. Am. Jour. Conch., vii, p. 102; Proc. Cal. Acad., v, 62, t. 2, f. 7. 281
Affinis (Pleurotoma), Gray. Reeve, Conch. Icon, f. 309, 1846. = Drillia flavescens, Reeve.

Digitized by Google

PAGE.
Agassizii (Pleurotoma), Verrill and Smith. Am. Jour. Arts and Sciences., 3d vol., xx, p. 394. 316
Agathine (Priam), Chenu. Conch., f. 903, p. 242 (1847). = Halia Priamus, Meuschen.
Aglaophanes (Drillia), Watson. Jour. Linn. Soc., p. 251, vol. xvi, 1882, ... 212
Agnewi (Drillia), T.-Woods. Proc. Roy. Soc. Tas., 1878, p. 36, ... 212
Alabaster (Drillia), Reeve. Proc. Zool. Soc., 1843, p. 181, 179
Alaskensis (Bela), Dall. Am. Jour. Conch., vii, p. 98, 1871, 216
Alata (Drillia), H. and A. Adams. Gen. Shells, 90. = Pl. crenularis, Lam.
Alba (Bela), Brown. Brit. Conch., 7, t. 5, f. 62. ? = B. rufa, Mont. 224
Alba (Bela), Pennant. ? = B. turricula, Montagu, . . 219
Alba (Clathurella), Desh. Moll. Reunion, p 110, pl. xii, f. 17–18, ... 296
Albata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, p. 210, 319
Albella (Pleurotoma), C. B. Adams. Conch. Contr., p. 63, 131, ... 319
Albibalteata (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 182. = C. Cumingii, Powis. 283
Albicans (Mangilia), Hinds. Moll. Voy. Sul., p. 23, pl. 7, f. 8, ... 258
Albicarinata (Pleurotoma), Sowb. Proc. Zool. Soc., 1870, p. 253. = P. oxytropis, Sowb.
Albicaudata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 299, ... 299
Albicincta (Drillia), Ad. and Reeve. Voy. Samarang, 40, t. 10, f. 6. = D. putillus, Reeve.
Albicincta (Mangilia), Gould. Proc. Bost. Soc. N. H., vii, 340, ... 271
Albicostata (Drillia), Sowb. Proc. Zool. Soc., 135, 1833, . 205
Albida (Pleurotoma), C. B. Ad. Proc. Bost. Soc. N. H., ii, p. 3, ... 319
Albida (Pl. Leufroyi, var.), Bucq., Dautz., Dollf. Moll. Roussilon, 96. = P. Leufroyi, Mich. 276
Albida (Mangilia), Deshayes. Exp. Morée, iii, p. 176, t. 19, f. 22–24, ... 245
Albifuniculata (Pleurotoma), Reeve. Proc. Zool. Soc., 1846, p. 6. = P. tincta, Reeve, ... 292
Albina (Pleurotoma), Lam. An. s. Vert., vii, p. 96, . . 167
Albinodata (Pleurotoma), Reeve. Zool. Proc., 6, 1846. = Drillia zebra, Lam.
Alboangulata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 206

Digitized by Google

PAGE.
Albocincta (Clathurella), Angas. Proc. Zool. Soc., 1871, p. 18, pl. i, f. 22, ... 285
Albocincta (Crassispira), C. B. Adams. Proc. Bost. Soc. N. H., ii, p. 3. = D. zebra, Lam.
Albocinctus (Fusus), Petit. Jour. de Conchyl., ii, 76, t. 1, f. 12, 1851. = Pusionella vulpina, Born., var. . . 236
Albofasciata (Pleurotoma), E. A. Smith. Ann. Mag. Nat. Hist., 491, 1877, ... 174
Albolaqueata (Mangilia), Carpenter. Proc. Zool. Soc., 1865, p. 280, ... 251
Albomaculata (Pleurotoma), C. B. Ad. Proc. Bost. Soc. N. H., ii, p. 3, ... 319
Albomaculata (Pleurotoma), d'Orb. Sagra. Hist. Cuba, ii, 176, 1846, pl. xxiv, f. 16–18. = D. zebra, Lamarck.
Albopustulata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 211. = D. zebra, Lam.
Albostrigata (Defrancia), Baird. Voy. Curacoa, pl. 37, f. 3, 4, 292
Albovallosa (Pleurotoma), Carp. Mazat. Shells, p. 396. = D. nigerrima, Sowb., var.
Albovirgulata (Mangilia), Souv. Jour. Conch., 1860, p. 124, pl. ii, fig. 12, ... 274
Albovittata (Mangilia), C. B. Adams. Proc. Bost. Soc. N. H., 1845, p. 4, ... 248
Albula (Pleurotoma), Hutton. Cat. Mar. Moll. N. Zeal., p. 12, 166
Albus (Fusus), Jeffreys, 1849. = Thesbia nana, Lovén.
Aleutica (Bela), Dall. Am. Jour. Conch., vii, p. 99, 1871, 216
Alternans (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 298, 299
Alternata (Mangilia), T.-Woods. Proc. Roy. Soc. Tas., 1878, 39, ... 312
Amabilis (Cithara), G. and H. Nevill. Jour. Asiat. Soc. Beng., 1874, pt. 2, p. 23, pl. i, f. 11, ... 273
Amabilis (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 40; Moll. Voy. Sulph., p. 21, pl. vii. f. 3, ... 287
Amabilis (Pleurotoma), Jickeli, MS. Küster, Conch. Cab., 25. = P. gemmata, Hinds, var.
Amanda (Drillia), Smith. Ann. Mag. N. H., 1882, 207, . 191
Amblia (Drillia), Watson. Jour. Linn. Soc., xvi, p. 249, 1882, 212
Americana (Bela), Packard. Mem. Bos. Soc., i, p. 233, pl. vii, f. 11, ... 220
Amicta (Pleurotoma), E. Smith. Ann. Mag. N. H., 1877, p. 488. = P. cingulifera, Lam., ... 166
Amœna (Defrancia), G. O. Sars. Friele, Jan Mayen Moll., p. 6, ... 313
Amplexa (Clathurella), Gould. Proc. Bost. Soc. N. H., vii, 338, ... 299

Digitized by Google

PAGE.
Anceps (Pleurotoma), Eichwald. Naturh. Lith. Volh., 225, 1830, ... 313
Ancistrosyrinx, Dall. Bull. Mus. Comp. Zool., ix, p. 53, 1881, ... 155, 176
Angasi (Drillia), Crosse. Jour. de Conch., 3d ser., iii, p. 87, pl. i, f. 5, 1863, ... 187
Angela (Cithara), Ad. and Angas. Proc. Zool. Soc., 1863, p. 419, pl. xxxvii, f. 4, ... 267
Angicostata (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 4, 252
Angiostoma (Cythara), Pease. Am. J. C., iv, p. 105.
= M. triticea, Kiener, ... 268
Angularis (Bela), Donov. Brit. Shells.
= B. turricula, Montagu, ... 219
Angulata (Daphnella), Cpt. Ann. Mag. N. H., 1865, xv, p. 395, 312
Angulata (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 64, 259
Angulata (Pleurotoma), Kiener. Pleur., 74, t. 26, f. 4.
? = P. rubida, Hinds.
Angulatus (Bela), Morch. Moll. Grœnl., No. 85.
= B. turricula, var. nobilis, Moll., ... 219
Angulifera (Clathurella), Reeve. Conch. Ic., pl. xxxix, f. 360, ... 278
Angulifera (Pleur.), Weinkauff. Cat. No 20.
= Pl. cingulifera, Lam.
Angulosa (Bela), Sars. Moll. Norv., 227, t. 16, f. 16, 1878.
= B. cancellata, Mighels, ... 218
Angulosa (Mangilia), E. A. Smith. Proc. Zool. Soc., 1871, p. 731, pl. lxxv, fig. 10, ... 256
Angusta (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 495, 211
Angustior (Pleurotoma), Jeffreys. Ann. Mag. Nat. H., 1877, xix, 330. = Var. of B. declivis, Lovén, ... 219
Anna, Risso. Hist. Nat. Eur. Merid., iv, 244, 1826.
? = Clathurella.
Anna (Mangilia), Jousseaume. Le Naturaliste, v, 325, 1883, 261
Annulata (Surcula), Reeve. Conch. Icon., pl. v, f. 25, 1843, 240
Anomala (Cronia), Angas. Proc. Zool. Soc., 1877, pl. v, f. 1; Tate, Proc. Linn. Soc. N. S. Wales, v, 131, . . . 318
Anteridion (Pleurotoma), Watson. Jour. Linn. Soc., xv, 399, 1881, ... 242
Antillarum (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 59, 261
Antillarum (Pleurotoma), Crosse. Journ. Conch., xiii, pl. i, f. 8. = P. Virgo, Lam., ... 168
Antillarum (Clathurella), d'Orb. Moll. Cuba, ii, 173, t. 24, f. 1–3, 1846, ... 279
Antipodum (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 1877, p. 491, ... 174
Antonia (Pleurotoma), Dall. Bull. Mus. Comp. Zool., ix, 59, 312

Digitized by Google

PAGE.
Aphanitoma, Bellardi. Moll. Terz. Piemonte, pt. 2, 241, 1877. = S. G. of Daphnella, ... 161
Apicalis (Pleurotoma), Montrouzier. J. de Conch., 1861, p. 277, pl. xi, f. 6. = C. felina, Hinds, ... 293
Apicata (Pleurotoma), Gray. Reeve, Mangilia, fig. 305, pl. xxxiii, ... 266
Apiculata (Mangilia), Montrouzier. J. de Conch., 1864, p. 264, pl. x, f. 2, ... 273
Appelii (Drillia), Weink. Conch. Cab., sp. 112, pl. xx, f. 5, 193
Appressa (Drillia), Carpenter. Ann. Mag. N. H., 1864, xiv, p. 46, ... 213
Aquatilis (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 111, 204
Araneosa (Pleurotoma), Watson. Jour. Linn. Soc., xv, 462, 1881, ... 299
Arata (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 116, . 210
Arctata (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 118, 294
Arctica (Bela), A. Adams. Proc. Zool. Soc., 1855, p. 121, 214
Arcuata (Surcula), Reeve. Conch. Ic., pl. iii, f. 15, 1843, 236
Areolata (Lachesis), Tiberi. Jour. de C., 1868, p. 73. = L. Folineæ, Phil. 225
Argillacea (Pleurotoma), Hinds. Proc. Zool. Soc., 1834, p. 40; Moll. Voy. Sul., p. 18, pl. vi, f. 1, ... 273
Armillata (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 111, ... 174
Armstrongi (Clathurella), G. and H. Nevill. J. A. S. Beng., 1875, pt. 2, p. 93, pl. vii, f. 13, ... 294
Aspera (Mitromorpha), Carpenter. Jour. de Conch., xii, 146, 1865, ... 317
Aspera (Mangilia), Hinds. Moll. Voy. Sulph., p. 19, pl. 6, figs. 7, 8; Proc. Zool. Soc., 1843, p. 40, ... 269
Asperrimus (Fusus), Brown. Ill. Conch. Gt. Br., 8, t. 6, f. 2, = P. purpureum, Montg.
Aspersa (Clathurella), Gould. Proc. Bost. Soc. N. H., vii, 338, 299
Asperulata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 296, ... 299
Assimilis (Bela), G. O. Sars. Mol. Reg. Arc. Nov., p. 231, pl. xxiii, f. 8; pl. viii, f. 17, 1878. = B. turricula, Mont., 219
Associata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, p. 300. (Not identified.)
Astricta (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 64, 260
Astricta (Surcula), Reeve. Conch. Icon., pl. xii, sp. 98, 1843, 240
Aterrima (Drillia), Sowb. Proc. Zool. Soc., 1833, . . 194
Atkinsoni (Drillia), T.-Woods. Roy. Soc. Tas., 1875, p. 142, 211
Atkinsoni (Mangilia), Tenison-Woods. Roy. Soc. Tasm., 1875, p. 141.
= Columbella speciosa, Angas, Manual, vol. v.

Digitized by Google

PAGE.
Atkinsonii (Drillia), E. A. Smith. Ann. Mag., 1877, p. 495, 21
Atoma, Bellardi. Moll. Terz. Piemonte, pt. 2, 324, 1877.
= Clathurella, Sect., ... 160
Atractoides (Pleurotoma), Watson, Jour. Linn. Soc., xv, 407, 1881, ... 175
Atramentosa (Drillia), Smith. Ann. Mag., N. H., 1861, 211, 199
Atrata (Pleurotoma), Anton. Verzeichniss, p. 73, . . 318
Atrior (Pleurotoma), C. B. Adams. Panama Shells, p. 138, 308. = D. aterrima, Sowb.
Atrostyla (Raphitoma), Dall. MS.
= D. cerina, Kurtz and Stimpson, var., ... 310
Attenuata (Pleurotoma), Montagu. Test. Brit., p. 266, pl. 9, f. 6, 1803, ... 308
Auberiana (Pleurotoma), d'Orb. Moll. Cuba, ii, 174, t. 24, f. 4–6. = C. rubricata, Reeve, ... 279
Augustæ (Pleurotoma), C. B. Ad. Contr. Conch., p. 61, . 319
Aulacoessa (Pleurotoma), Watson. Jour. Linn. Soc., xv, 472, 1881, ... 307
Aurantica (Drillia), Carpenter. Jour. de Conch., 3d ser., v, 145, 1865. = D. torosa, Carpenter, var. 183
Aureola (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 113, 302
Auriculifera (Drillia), Lam. An. sans Vert., vii, p. 91, . 185
Australis (Bela), Ad. and Ang. Proc. Zool. Soc., 1863, p. 420, 223
Australis (Surcula), Roissy. Buffon, Hist. Nat., . . 236
Awamoaensis (Drillia), Hutton. Cat. Tert. Moll. N. Z., 4, 1874. Trans. N. Zeal. Inst., xv, 131, ... 208
Axis (Pleurotoma), Reeve. Proc. Zool. Soc., 1846, p. 3, . 304

Babylonia, var. (Pleurotoma), Kien., pl. 1, fig. 2.
= P. Garnonsii, Reeve, ... 163
Babylonia (Pleurotoma), Linn., ed. x, p. 754, . . . 162
Badia (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 64, . 247
Bætica (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 110, . 193
Balansai (Cithara), Crosse. Jour. Conch., 1873, p. 65; p. 131, pl. v, fig. 5, ... 264
Ballista (Drillia), von Maltzan. Jahrb. Mal. Gesell., 1883, p. 119, t. 3, f. 2, ... 208
Balteata (Clathurella), Pease. Proc. Zool. Soc., 1860, p. 143, 299
Balteata (Mangilia), Reeve. Conch. Icon. Mangil., f. 57, 1846, ... 247
Balteata (Pleurotoma), Beck. Kien., Icon., pl. 13, f. 2.
= P. undatiruga, Bivona, ... 238
Bandella (Pleurotoma), Dall. Bull. Mus. Com. Zool., ix, 59, 312
Barbieri (Raphitoma), Brusina (1866). Contr. Faun. Moll. Dalm., p. 33. = Pleurotoma anceps, Eich. . . . 313

Digitized by Google

PAGE.
Barkliensis (Drillia), H. Adams. Proc. Zool. Soc., 1869, t. 19, f. 3, ... 192
Barnardi (Clathurella), Brazier. Proc. Linn. Soc. N. S. W., i, p. 157, ... 299
Bathyraphe (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 305, ... 274
Beckii (Bela), Moll. Moll. Grœnl., p. 14.
= P. bicarinata, Couth. 215
Beckii (Drillia), Reeve. Proc. Zool. Soc., 1842, . . 186
Beckii (Drillia), Weinkauff, Küster. = D. unizonalis, Lam.
Bela, Leach, Gray. Proc. Zool. Soc., 134, 1847, . . 156, 213
Bella (Daphnella), Pease. Proc. Zool. Soc., 1860, p. 147.
= Mangilia interrupta, Reeve, ... 266
Bella (Mangilia), Ad. and Aug. Proc. Zool. Soc., 1863, p. 419, pl. 37, f. 6. = M. Boakei, Nevill. 270
Bella (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 41, . 249
Bella (Taranis), Verrill. Dall. Bull. Mus. Comp. Zool., ix, 71. Probably intended for T. pulchella, Verrill.
Bellardia, Bucq., Dautz. and Dollf. Moll. Roussilon, 85, 1883.
= Bellardiella, Fischer, 1883.
Bellardiella, Fischer. Manuel de Conchyl., 593, 1883.
= Daphnella, Sect. . . . . , 160, 312
Bellardii (Oligotoma), Jousseaume. Bull. Soc. Zool. France, 1883, 202, ... 320
Bellaspira, Conrad. Am. Jour. Conch., iii, 261, 1867.
= Mangilia.
Bellula (Drillia), Smith. Ann. Mag. N. H., 1882, p. 209, . 191
Belomitra, Fischer. Jour. de Conch., 1882, p. 275.
= S. G. of Bela, ... 156, 224
Benedicti (Mangilia St. Gallæ, var.), T.-Woods. Proc. Roy. Soc. Tas., 1876, p. 137, ... 312
Beraudiana (Pleurotoma), Crosse. Ill. Conch., xi, p. 88, t. 1, f. 5. = D. Angasi, Crosse.
Bertiniana (Clathurella), Tap.-Can. Bull. Soc. Zool., Fr. iii, 247, pl. vi, f. 7–8. = Var. M. rubida, Hinds, . . 271
Bertrandi (Mangilia), Payr. Coq. de Corse, p. 144, t. 7, f. 12–13, ... 244
Bertrandi (Pleurotoma), Philippi. Moll. Sicil., 1, 198, t. 11, f. 20, 1836. = M. nebula, Montg.
Bicanalifera (Drillia), Sowb. Proc. Zool. Soc., 1833, . . 177
Bicarinata (Bela), Couth. Proc. Bost. Soc. N. Hist., 1, 50, 1841; Verrill, Trans. Conn. Acad., v, 481, . . . 214
Bicarinata (Clathurella), Pease. Proc. Zool. Soc., 1862, p. 243, ... 289
Bicarinatus (Murex), Wood. Ind. Test. Suppl., t. 5, f. 7.
= Pleurotoma cryptorrhaphe, Sowb.

Digitized by Google

PAGE.
Bicinctula (Mangilia), G. and H. Nevill. J. A. S. B., xl, pt. 2, p. 6, pl. i, f. 15. = M. Boakei, Nevill, . . . 270
Biclathrata (Mangilia), Souverbie. J. de Conch., 1872, p. 363; 1873, p. 59, pl. iv, f. 4, ... 272
Bicolor (Clathurella), Angas. Proc. Zool. Soc., 1871, p. 18, pl. i, fig. 20, ... 284
Bicolor (Drillia), Gray. Ann. Mag. N. H., 1838. p. 29, . 212
Bicolor (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 62, . 268
Bicolor (Pleurotoma), Risso. Eur. Merid., iv, 214. = P. purpurea, Mont., ... 275
Bicolor (Drillia), Sowb. Proc. Zool. Soc., 1833, p. 135, . 196
Biconica (Mangilia), C. B. Adams. Conch. Contr., p. 65, . 248
Bifasciata (Borsonia), Pease. Proc. Zool. Soc., 1860, p. 143, 227
Bijubata (Surcula), Reeve. Proc. Zool. Soc., 1843, p. 182, 242
Bilineata (Clathurella), Angas. Proc. Zool. Soc., 1871, p. 18, pl. i, f. 23, ... 288
Bilineata (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 113. = D. pulchella, Reeve.
Bimarginata (Pleurotoma), Lam. Anim. s. Vert., vii, 83. = Clavatula muricata, Lam., ... 229
Bipartita (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 1877, p. 500, ... 234
Biseriata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, p. 304, 274
Bivonæ (Pleurotoma), Maravigna. Rev. Zool. Cuv. Soc., 1840. = P. attenuata, Mont, ... 309
Bivoniana (Pleurotoma), Marav. Rev. Zool., 1840. = P. multilineolata, Desh.
Blakeana (Bela), Dall. Bull. Mus. Comp. Zool., ix, 54, 1881, 222
Blanfordi (Clathurella), G. and H. Nevill. J. A. S. Beng., 1875, pt. 2, p. 92, pl. vii, f. 14, ... 291
Boakei (Mangilia), G. and H. Nevill. Jour. Ceylon B. R. A. S., 1867–70, p. 142, ... 270
Boholensis (Pleurotoma), Reeve. Proc. Zool. Soc, 1843, p. 184, ... 301
Bolbodes (Pleurotoma), Watson. Jour. Linn. Soc., xv, 402, 1881, ... 242
Boothii (Pleurotoma), Smith. Wern. Soc. 98, t. 1, f. 1. = P. Leufroyi, Mich.
Borealis (Mangilia), Lovén. Idex. Mol. Lit. Scand., p. 14. = Pleurotoma anceps, Eich. 313
Borealis (Pleurotoma), Reeve. Conch. Icon., Corrections. = B. decussata, Couth. 217
Bornii (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 1877, p. 499, ... 234
Borsonia, Bellardi. Bull. Soc. Geol. France, x, 30, 1839, 157, 227
Bottæ (Drillia, Valenc. Kiener, Coq. viv., t. 15, f. 12, . 192

Digitized by Google

PAGE.
Brachystoma (Bela), Pfeiffer. Adams' Genera, i, 92, . . 223
Brachystoma (Pleurotoma), Phil. Enum. Moll. Sic., ii, p. 169, pl. 26, f. 10, 1844, ... 308
Brachytoma, Swainson. Malac., 154, 314, 1840. = Drillia, Sect. 155, 176
Brachytona (Drillia), Watson. Jour. Linn. Soc., xv, 415, 1881, ... 212
Brazieri (Clathurella), Angas. Proc. Zool. Soc., 1871, p. 18, pl. 1, f. 21, ... 295
Branscombi (Pleurotoma), Clark. = Juv. P. gracilis, Montagu, ... 312
Brenchleyi (Clathurella), Angas. Proc. Zool. Soc., 1877, p. 37, pl. v, f. 12, ... 285
Brevicaudata (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 186. = P. fasciatus, Lam.
Brevis (Cithara), Pease. Am. Jour. Conch., iii, p. 217, pl. 15, f. 11. = M. cithara, Gould, ... 263
Brevis (Mangilia), C. B. Adams. Conch. Contr., p. 66, . 248
Brevis (Pleurotoma), Leche. Kongl. Sv. Vet. Akad. Handl., Bd. 16, No. 2, p. 56. = B. bicarinata, Couth. . . 215
Brevis (Pleur.), Requien. = Mangilia Vauquelini, Payr. . 243
Brunnea (Clathurella), Pease. Proc. Zool. Soc., 1860, p. 143, 299
Brunnea (Pleurotoma), Perkins. Bost. Proc., xiii, 121, 1869. = C. plicata, C. B. Adams, ... 277
Brunneomaculata (Surcula), Sowb. Proc. Zool. Soc., 1873, p. 720, t. 59, f. 8, ... 206
Brychia (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 451, 1881, ... 315
Buchanani (Drillia), Hutton. Cat. Tert. Moll. N. Zeal., 4, 1873, ... 208
Buchanensis (Pleurotoma), Macgill. Moll. Aberd. = M. linearis, Mont.
Buccinatus (Fusus), Lam. Anim. s. Vert., vii, 132. = Pusionella vulpina, Born, ... 235
Buccinoides (Clathurella), Pease. Proc. Zool. Soc., 1860, p. 144, ... 299
Buccinoides (Pleurotoma), Lam. An. s. Vert., vii, p. 94. = Pl. sinuata, Born. 233
Bulbacea (Drillia), Watson. Jour. Linn. Soc., xv, 418, 1881, 212
Butleri (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 303, 307

Cælata (Clathurella), Garrett. Proc. A. N. S. Phila., 1873, p. 220, pl. 2, f. 34, ... 295
Cælata (Mangilia), Hinds. Moll. Voy. Sul., p. 21, pl. 7, f. 6, 258
Cærulans (Mangilia), Appelius. Bull. Mal. Ital., ii, 137, t. 4, f. 1, 1869. = M. indistincta, Monts.

Digitized by Google

PAGE.
Cærulans, var. sicula (Pleurotoma), Monterosato. Notizie, p. 52. = P. sicula, Reeve.
Cærulans (Pleurotoma), Phil. Enum. Moll., ii, p. 168, pl. xxvi, f. 4. = P. Bertrandi, Payr., ... 244
Cærulea (Pleurotoma), Martens (not Weink.) Conch. Mittheil., 107, t. 21, f. 5–9. = Pl. pyramidata, Val.
Cærulea (Pleurotoma), Weink. Conch. Cab., p. 34, pl. vii, f. 4–6, ... 230
Caffra (Drillia), Smith. Ann. Mag. N. H., 1882, p. 209, . 191
Cagayanensis (Drillia), Reeve. Proc. Zool. Soc., 1846, p. 4, 180
Cailliaudi (Conus), Jay. Ann. Lyc. N. Y., iv, 169, t. 10, f. 8, 1846, ... 319
Calcarata (Pleurotoma), Grat. Monts. Jour. Soc. Sc. Nat. Palermo, 105, 1878, ... 312
Caledonica (Mangilia), Smith. Ann. Mag. N. H., 1882, p. 217, ... 261
Callosa (Drillia), Val., MS. Kiener, Coq. viv., 50, t. 18, f. 1, 192
Canaliculata (Clathurella), Pease. Am. Jour. Conch., iii, p. 219, pl. 15, f. 17. = M. rubida, Hinds, . . . 271
Canaliculata (Clathurella), Reeve. Proc. Zool. Soc., 1846, p. 6, ... 284
Cancellata (Bela), Mighels and Adams. Proc. Bost. Soc. N. H., 1841, i, p. 50, ... 218
Cancellata (Bela), G. O. Sars. Moll. Arc. Norv., p. 224, pl. xxiii, f. 31; pl. viii, f. 9. = B. Sarsii, Verrill.
Cancellata (Citharopsis), A. Ad. Ann. Mag. N. H., 1865, xv, p. 323, ... 274
Cancellata (Daphnella), Hutton. Jour. Conch., 1878, p. 18, 306
Cancellata (Drillia), Cpt. Pro. Acad. Nat. Sc. Phila., 1865, p. 63, ... 183
Cancellata (Drillia), Gray. Reeve, Icon., sp. 317, 1846, . 197
Cancellata (Pleurotoma), Calcara. = Pl. clathrata, De Serres, ... 276
Cancellatum (Pleurotoma), Sowb. (non Calc.). Ind. Brit. Shells, t. 19, f. 9. = P. Cordieri, Payr. 275
Candeana (Clathurella), d'Orb. Moll. Cuba, ii, 175, t. 24, f. 10–12, ... 279
Candelabrum, Dall. Bull. Mus. Comp. Zool., v, 1878. = Ancistrosyrinx, Dall.
Candens (Drillia), Smith. Proc. Zool. Soc., 1879, p. 192, t. 19, f. 17, ... 203
Candida (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 20; Moll. Voy. Sul., p. 20, pl. 6, f. 18, ... 273
Candida (Pleur.), Jones. H. and A. Adams' Genera, i, 88, 174
Candida (Pleurotoma), Mke. Ch., 4, 1337–38. = P. tornata, Dillw.

Digitized by Google

PAGE.
Candidissima (Lachesis), Phil. Moll. Sic., i, p. 222, t. xi, f. 18, ... 225
Candidissima (Mangilia), C. B. Adams. Proc. Bost. Soc. N. H., ii, p. 4, ... 226, 248
Candidula (Clathurella), Reeve. Conch. Ic., pl. 39, f. 358, 1846, ... 278
Candidus (Fusus), Phil. Zeit. Mal., 148, 1848. Abbild. iii, 117, t. 5, f. 7. ? = Pusionella valida, Dunker, . . . 234
Canfieldi (Clathurella), Dall. Am. Jour. Conch., vii, p. 101, t. 15, f. 9, ... 280
Cantharis (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 118, 199
Capensis (Pleurotoma), Smith. Ann. Mag. N. H., 1882, p. 296, ... 299
Capillacea (Mangilia), Reeve. Proc. Zool. Soc.. 1846, p. 60, 263
Carbonaria (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 187. = D. callosa, Val.
Cardinalis (Mangilia), Reeve. Proc. Zool. Soc., 1845, p. 115, 258
Caribæa (Clathurella), d'Orb. Moll. Cuba, ii, 172, t. 23, f. 32–34, ... 279
Caribbæa (Drillia), Smith. Ann. Mag. N. H., 1882, p. 211, 199
Carinata (Pleurotoma), Gray. Griff., Cuv. An. King, pl. 23, 173
Carinata (Spirotropis), Bivona. Gen. Moll., 12; Phil. Moll. Sicil., t. 26, f. 15, ... 213
Carinulata (Clathurella), Souverbie. Jour. Conch., 1875, p. 289, pl. xiii, f. 6, ... 289
Carnosula (Pl. Leufroyi, var.), Jeffreys. Brit. Conch., iv, 367, ... 276
Carpenteri (Pleurotoma), Folin. Meleagrinicoles, p. 53, pl. v, f. 12, ... 250
Carpenteri (Pleurotoma), Verrill and Smith. Am. Jour. Sc., 3d ser., xx, p. 395. 310
Carpenteriana (Surcula), Gabb. Proc. Cal. Acad. Sci., 183, 1865. Pal. Cal., ii, 5, t. 1, f. 8, ... 239
Casta (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 64. = Daphnella, Reeveana, Tryon, ... 305
Casta (Pleurotoma), Hinds. Moll. Voy. Sulph., p. 25, pl. 7. f. 20, ... 300
Castanea (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 63, 255
Castanea (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 112, . 177
Castaneus (Bela), Brown. Brit. Shells, 6, t. 5, f. 43, 44. = B. rufa, Mont. 224
Catelini (Fusus), Petit. Jour. de Conchyl., ii, 75, t. 1, f. 2, 1851. = Pusionella aculeiformis, Lam. 234
Catena (Surcula), Reeve. Conch. Icon., pl. v, f. 36, 1843, . 240
Cathedralis (Candelabrum), Dall. Bull. Mus. Comp. Zool., v, 1878. = Ancistrosyrinx elegans, Dall.

Digitized by Google

PAGE.
Caudata (Pl. reticulatum, var.), Requien. Coq. Corse., 72. = C. Cordieri, Payr.
Caudicula (Pleurotoma), Chieregh. Brusina, Ipsa Chieregh. Conch., 158. = P. Leufroyi, Mich.
Cavernosa (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 60, 251
Cavernosa (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 118, ... 290
Cedo-nulli (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 185. = C. Pagoda, Lesson.
Celebensis (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 46; Moll. Voy. Sulph., p. 26, pl. ix, f. 5, ... 260
Cerea (Mangilia), Carpenter, Ann. Mag. N. H, xv, 1865, p. 400, ... 251
Cerinum (Pleurotoma), Kurtz and Stimps. Proc. Bost Soc. N. H., iv, p. 115, ... 310
Cerithina (Pleurotoma), Anton. Verzeichniss, p. 73, . 318
Cerithoidea (Pleurotoma), Cpr. Mazat. Shells, p. 394. = D. aterrima, Sowb.
Cernica (Cythara), G. and H. Nevill. J. A. S. Beng., 1875, pt. ii, p. 94, pl. vii, f. 16. = M. Isseli, var., . . . 272
Ceroplasta (Borsonia), Watson. Jour. Linn. Soc., xv, 473, 1881, ... 228
Ceylonica (Pleurotoma), E. A. Smith. Ann. and Mag. N. H., 1877, p. 489, ... 174
Chariessa (Pleurotoma), Watson. Jour. Linn. Soc., xv, 458, 1881, ... 299
Cheesemani (Drillia), Hutton. Jour. de Conch., 16, 1878. = D. Zealandica, Smith.
Chauveti (Pleurotoma), Req. Coq. de Corse, p. 101. = Lachesis minima, Montg., ... 225
Chemnitzii (Pleurotoma), Anton. Verzeichniss, p. 74, . 318
Chocolatum (Drillia), E. A. Smith. Ann. and Mag. N. H., 1877, p. 492, ... 211
Chordula (Murex), Turton. Dict., p. 94. = Juv. Bela rufa, Mont., ... 224
Chyta (Pleurotoma), Watson. Jour. Linn. Soc., xv, 467, 1881, 299
Cincta (Clathurella), Dkr. Mal. Blatt, xviii, p. 161. = C. rugosa, Mghels. Garrett, Mss., ... 297
Cincta (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 65. . 259
Cincta (Surcula), Lam. Anim. sans Vert., vii, p. 92, . . 242
Cincta (Pleurotoma), Sowb. (not Lam.). Proc. Zool. Soc., 1833, p. 136. = D. zonulata, Reeve.
Cinctella (Mangilia), Pfeif. Arch. f. Nat., 1840, i, p. 258, . 248
Cinerea (Bela), Möll. Moll. Grœnl, p. 13, ... 218
Cinerea (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 40; Moll. Voy. Sulph., 18, pl. 6, f. 3. 273

Digitized by Google

PAGE.
Cinerea (Pleurotoma), Weinkauff. Conch. Cab., 126, pl. 23, f. 1, 3. = D. zebra, Lamarck.
Cingulifera (Pleurotoma), Lam. Anim. sans Vert., vii, p. 94, ... 166
Cinnamomea (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 45, ... 266
Circinata (Pleurotoma), Dall. Proc. Cal. Acad., v, p. 61, pl. ii, f. 5, 1873, ... 316
Circumsecta (Pleurotoma), Migh. Proc. Bost. Soc. N. H., ii, p. 24, ... 319
Circumvoluta (Pleurotoma), Watson. Jour. Linn. Soc., xv, 465, 1881, ... 299
Cirratum (Pleurotoma), Brugnone (non Bellardi, 1847). Mem. Pleur. Foss., 1862, p. 17, f. 9. = M. Mörchi, Malm.
Cithara (Mangilia), Gould. Proc. Bost. Soc. Nat. Hist., iii, p. 140, 1849, ... 263
Citharella (Mangilia), Lam. Anim. sans Vert., Edit. Desh., ix, 407, ... 257
Citharopsis, Pease. Am. Jour. Conch, iv, 97, 1868. = Columbellidæ.
Clandestina (Pleurotoma), Desh. Moll. Reunion, p. 110, pl. xii, f. 15–16, ... 298
Clara (Mangilia), Reeve. Proc. Zool. Soc., 1845, p. 112, . 252
Clara (Surcula), Martens. Mittheil., i, p. 35, pl. 8, f. 1 *a-d*. 239
Clathrata (Clathurella), Marcel de Serres. Geogn. du Midi, 113, t. 2, f. 7, 8, ... 276
Clathrata (Daphnella), Gabb. Proc. Cal. Ac. Nat. Sc., 1865, p. 185, ... 306
Clathrata (Drillia), Gray. Ann. Mag. N. H., i, 1838, p. 28, . 212
Clathrata (Pleurotoma), Reeve. Conch. Ic., pl. 39, f. 361. = C. candidula, Reeve, var., ... 278
Clathurella, Carpenter. Mazatl. Cat. 399, 1857, . . 159, 274
Clavata (Mangilia), C. B. Sowerby. Proc. Zool. Soc., 1870, p. 254, ... 261
Clavata (Drillia), Sowb. Proc. Zool. Soc., 1833, p. 135, . 190
Clavatulus (Murex), pars. Dillw. Cat., i, p. 713. = Pleur. muricata, Lam.
Clavatulus (Murex), Dillwyn. Cat. ii, p. 713. (Ex-parte.) = Pleurotoma taxus, Chemn.
Clavatula, Lamarck. Syst. An., 84, 1801, . . . 157, 228
Clavatulinæ, ... 153
Clavicantha, Swainson. Malac., 155, 314, 1840. = Clavatula, Lam.
Clavulus (Pleurotoma), Sowb. Proc. Zool. Soc., 1833, p. 134. = Columbella, Manual, v, 184.

Digitized by Google

PAGE.
Clavus, Montfort. Conch. Syst., ii, 434, 1810.
= Drillia, Sect. 155, 185
Clevei (Oligotoma), Jousseaume. Bull. Soc. Zool. France, 1883, 200, ... 319
Climacota (Drillia), Watson. Jour. Linn, Soc., xv, 1881, 428, 200
Clinura, Bellardi. Moll. Terz. Piemonte, 204, 1877.
= Surcula, Sect. 158
Clionella, Gray. Zool. Proc., 153, 1847, . . . 157, 233
Clionellæformis (Drillia), Weinkauff. Conch. Cab., p. 106, t. 23, f. 5, ... 198
Coarctata (Mangilia), Forbes. Ann. Nat. Hist., v, 107.
= M. costata, Forbes and Hanley, ... 244
Coarctata (Mangilia), Weink. M. M. Conch., ii, p. 125 (non Forbes). = M. multilineolata, Desh.
Coccinata (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 118, 188
Coccinea (Pleurotoma), Anton. Verzeichniss, p. 73, . . 318
Cochlespira, Conrad. Am. Jour. Conch., i, 210, 1865.
= Pleurotoma, Lam.
Coffea (Drillia), Smith. Ann. Mag. N. H., 1882, p. 209, . 191
Cognata (Pleurotoma), E. A. Smith. Ann. and Mag. N. H., 1877, p. 490, ... 170
Colini (Clavatula), von Maltzan. Jahr. Mal. Gesell., 1883, 126, t. 3, f. 0, ... 230
Collaris (Pleurotoma), Sowb. Proc. Zool. Soc., 1833.
= D. zebra, Lam.
Columbarium, Martens. Conch. Mitth., p. 105, t. 21, f. 1–3, 1881, ... 154, 175
Columbella (Pleurotoma), Dall. Bull. Mus. Comp. Zool. ix, 60, 312
Columbelloides (Cythara , Reeve. Proc. Zool. Soc., 1846, p. 62. = M. Marginelloides, Reeve, ... 261
Comarmondi (Pleurotoma), Mich. Bull. Soc. Linn. Bord., iii, 263, t. 1, f. 6. = P. gracilis, Mont., ... 312
Comatotropis (Pleurotoma), Dall. Bull. Mus. Comp. Zool., ix, 58, ... 312
Commoda (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 299, 299
Companyoi (Mangilia), Bucq., Dautz. and Dollf. Moll. Roussillon, 108, t. 15, f. 20–22, 1883, ... 245
Compsa (Pleurotoma), Watson. Jour. Linn. Soc., xv, 470, 1881, ... 307
Compta (Cithara), Ad. and Ang. Proc. Zool. Soc., 1863, p. 419, pl. xxxvii, f. 5, ... 306
Compta (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 118. = C. vultuosa, Reeve, ... 296
Concentricostata (Mangilia), Reeve. Proc. Zool. Soc. 1845, p. 117, ... 258

Digitized by Google

PAGE.
Concinna (Mangilia), Gould. Proc. Zool. Soc. N. H., 1861, p. 382, ... 306
Concinna (Pleurotoma), Dunker. Proc. Zool. Soc., 1856, p. 356; Mal. Blatt., xviii, p. 160. = C. Reeveana, Desh., . 291
Concinna (Pleurotoma), Scacchi. Cat. Conch. Reg. Neapol., 1836, p. 12, fig. 18, ... 277
Concinnula (Bela), Verrill. Trans. Conn. Ac., v, p. 468, pl. xliii, f. 15; pl. lvii, f. 11, 1882, ... 220
Concolor (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 498, ... 212
Conica (Pleurotoma). Enc. Meth., pl. 439, f. 9 *a-b*. = P. muricata, Lam. 229
Coniformis (Cythara), Gray. Moll. Voy. Blossom, p. 119, 264
Coniformis (Pleurotoma), Souverbie. Jour. de Conch., 1875, p. 288, pl. xiii, f. 5. = M. Souverbiei, Tryon, . 265
Conohelicoides (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 62, ... 262
Conoidea (Bela), Sars. Moll. Norv., 236, t. 16, f. 14, 1878, 221
Conopleura, Hinds. Moll. Voy. Sulph., p. 24, 1844. = Drillia, Sect. 155, 211
Consimilis (Pleurotoma), Smith. Proc. Zool. Soc., 1879, p. 188, t. 19, f. 11. = D. Sinensis, Hinds.
Consociata (Crassispira), E. A. Smith. Ann. Mag. N. H., 1877, p. 496. Jahrb. Mal. Gesell., 1883, 121, t. 3, f. 4, . 192
Constricta (Clathurella), Gabb. Proc. Cal. Ac. Nat. Sc., 1865, p. 184, ... 299
Contortula (Clathurella), G. and H. Nevill. J. A. S. Beng., 1875, pt. 2, p. 92, pl. vii, f. 12, ... 294
Contracta (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 185. = Mangilia gracilenta, Reeve, ... 252
Convexa (Defrancia), Jeffr. Ann. Mag. N. H., 1882, p. 33, 299
Coppingeri (Mangilia), Smith. Proc. Zool. Soc., 1881, p. 27, pl. iv, f. 2, ... 255
Coralligena (Pl. Leufroyi, var.), Monterosato. Enum. e. Sinon, 46. = M. Leufroyi, Mich.
Corallina (Mangilia), Watson. Jour. Linn. Soc., xv, 435, 1881, ... 249
Corbis (Pleurotoma), Michaud. Monterosato. Enum. e. Sinon, 46. = P. purpureum, Mont. 275
Cordiera, Rouault. Bull. Soc. Geol., v, 1848. = Borsonia, Bell. 227
Cordieri (Clathurella), Payr. Moll. Corse., 144, t. 7, f. 11, 275
Coreanica (Pleurotoma), Ad. and Reeve. Voy. Samarang, t. 10, f. 8. = P. javana, Linn. 237
Cornea (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 5, . 253
Cornea (Pleurotoma), Anton. Verzeichniss, p. 73, . . 318

Digitized by Google

PAGE.
Cornuta (Pleurotoma), Sowb. Proc. Zool. Soc., 1833.
= D. nigerrima, Sowb.
Coronata (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 45; Moll. Voy. Sul., p. 26, pl. ix, f. 2, ... 260
Coronata (Mangilia), Mighels. Proc. Bost. Soc., 1845, p. 23, 271
Coronatus (Murex Turris), Chemn. Conch. Cab., xi, p. 114, t. 190, f. 1831 and 1832. = Pleurotoma muricata, Lam.
Corpulenta (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 446, 1881, ... 315
Corrugata (Borsonia), Pease, MSS. Carp. Zool. Proc., 1865, 516; Am. Jour. Conch., iii, 232, ... 228
Corrugata (Clathurella), Dkr. Mal. Blatt., xviii, p. 159, 1871. = C. rubroguttata, H. Ad. 292
Corrugata (Pleurotoma), Kien. Coq. viv., t. 9, f. 2.
= P. undatiruga, Bivona, ... 238
Corrugata (Pleurotoma), Sowerby. Zool. Proc., 137, 1833.
= Drillia Sowerbyi, Reeve.
Corusca (Drillia), Reeve. Proc. Zool. Soc., 1843, p. 183, . 209
Costata (Mangilia), Forbes and Hanley. Brit. Moll., iii, 485, 244
Costata (Pleurotoma), Gray, MSS. Reeve, Icon., sp. 298, 1846. = M. trilineata, C. B. Ad. 248
Costatum (Pleurotoma), Donovan. Brit. Shells, v, t. 179, f. 4. = B. septangularis, Mont. 223
Costulata (Mangilia), Dkr. Mal. Blatt., vi, p. 227; xviii, p. 165, ... 255
Costulata (Mangilia), Risso. Hist. Nat. Eur. Mer., iv, p. 219, 1826. = D. nebula, Montg. 307
Costulata (Pleurotoma), DeBlainv. Faune Franç., t. 4, f. 6, 309
Costulatum (Pleurotoma), Gmelin. Syst. Nat.
? = P. Cordieri, Payr.
Costulifera (Cithara), Pse. Carpenter, Proc. Zool. Soc., 516, 1865. = Cithara ornata, Pse. Am. Jour. Conch., iii, 232.
Coxi (Drillia), Angas. Proc. Zool. Soc., 1867, p. 113, pl. 13, f. 15. = D. Sinensis, Hinds.
Cranchiana (Mangilia), Leach. = M. linearis, Mont.
Cranchii (Pleurotoma), Brown. Brit. Shells, 6, t. 5, f. 5.
= B. rufa, Mont. 224
Crassicostata (Borsonia), Pease. Proc. Zool. Soc., 1860, p. 143, ... 227
Crassicostata (Mangilia), C. B. Adams. Conch. Contr., p. 66, 1850. = M. badia, Reeve, ... 247
Crassicostata (Mangilia), Dunk. Mal. Blatt, xviii, p. 164, . 261
Crassilabrum (Mangilia), Reeve. Conch. Ic., sp. 36, 1846, . 265
Crassilabrum (Pleurotoma), Mighels. Proc. Bost. Soc. N. H., ii, ... 319

Digitized by Google

PAGE.
Crassilabrum (Mangilia), Reeve. Proc. Zool. Soc., 1843, p. 135, ... 258
Crassispira, Swainson. Malac., 152, 313, 1840. = Drillia, Sect. 155, 191
Craticulata (Defrancia), Olivi (nec Linn.). Chieregh. Conch., 160. = M. Cordieri, Payr.
Craticulata (Lachesis), Mörch. Mal. Blätter, vii, p. 104, . 226
Crebricostata (Daphnella), Cpt. Ann. Mag. N. H., 1865, xv, p. 28, ... 312
Crebricostata (Pleurotoma), Hinds. Proc. Zool. Soc., 1843, p. 41; Reeve, Icon. Pleurotoma, Corrections. = D. Maravignæ, Bivona.
Crebriplicata (Pleurotoma), Reeve. Proc. Zool. Soc., 1846, p. 3, ... 305
Crenularis (Drillia), Lam. Anim. sans Vert., vii, p. 92, . 178
Crenulata (Daphnella), Pease. Am. Jour. Conch., iii, p. 221, pl. 15, fig. 20, ... 304
Crispa (Pleurotoma), Lam. Anim. s. Vert., vii, p. 95, 1818, 163
Crispatum (Pleurotoma), Phil. En. Moll. Sic., i, p. 200; ii, p. 170, t. 26, f. 12. = D. Loprestiana, Calcara, . . 209
Crocata (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 110, . 204
Cryptoconus, v. Koenen. Arch. f. Nat., 1880, ii, 211. = Genotia, Sect. 154
Cryptorrhaphe (Pleurotoma), Sowb. App. Tank. Cat., p. 14, 168
Crystallina (Clathurella), Gabb. Proc. Cal. Ac. N. S., 1865, p. 184, ... 299
Cubensis (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 211. = Mangilia luctuosa, d'Orb. 246
Cunninghami (Pleurotoma), Smith. Proc. Zool. Soc., 1881, p. 27, pl. iv, f. 1. ? = B. subluta, Gould, ... 222
Cuprea (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 187. = D. fuscescens, Gray.
Curculio (Clathurella rugosa, var.), Nevill. Jour. As. Soc., 1875, 86, ... 297
Curta (Daphnella), Pease. Am. Jour. Conch., iii, p. 221, pl. 15, f. 22, ... 304
Curvata (Pleurotoma), Anton. Verzeichniss, p. 74, . . 318
Cumingii (Clathurella), Powis. Proc. Zool. Soc., 1835, . 283
Cycladensis (Pleurotoma), Reeve. Conch. Ic., pl. xxxii, fig. 289, 1845. = D. brachystoma, Phil. 308
Cyclophora (Clathurella), Desh. Moll. Reunion, p. 111, pl. xii, f. 19–21, 1863, ... 292
Cylindracea (Bela), Möll. Moll. Grœnl., p. 13. = B. bicarinata, Couth. 215
Cylindrica (Clathurella), Pease. Proc. Zool. Soc., 1860, p. 143, ... 299

Digitized by Google

PAGE.
Cylindrica (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 60, 267
Cyrilli (Raphitoma), Brusina. Contr. Fauna Dalm., 64.
= M. linearis, Mont.
Cythara, Schumacher. Essai nov. gen., 245, 1817.
= Mangilia, Sect. 159, 261
Cytharella, Monterosato. = Cithara.
Cytharopsis, A. Ad. Ann. Mag. N. H., 1865, xv, 322.
= Mangilia, Sect. 159, 274

Dædalea (Clathurella), Garrett. Proc. A. N. S., 1873, p. 219, pl. 2, f. 33, ... 294
Dædalea (Cythara), Pse. Am. Jour. Conch., iii, p. 218, pl. 15, f. 13, 1867. = C. debilis, Pease, ... 270
Dædala (Pleurotoma), Reeve. Proc. Zool. Soc., 1846, p. 6.
= M. margaritifera, Gray, ... 258
Dalli (Drillia), Verrill and Smith. Trans. Conn. Ac., v, p. 451, pl. lvii, f. 1, 1 *a*, ... 181
Daphnella, Hinds. Voy. Sulphur, 25, 1844, ... 160
Daphnelloides (Pleurotoma), Reeve. Conch. Ic., pl. xxiv, f. 206. = P. marmorata, Hinds, ... 302
Darnleyensis (Mangilia), Brazier. Proc. Linn. Soc. N. S. Wales, i, 154, ... 256
Debilis (Cythara), Pease. Am. Jour. Conch, iv, p. 105, 1868, ... 270
Debilis (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 39; Moll. Voy. Sulph., p. 17, pl. 5, f. 16, ... 282
Decora (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 215.
= M. trilineata, C. B. Ad., ... 248
Decorata (Daphnella), C. B. Adams. Conch. Contr., p. 62.
= D. Lymneiformis, Kiener, ... 300
Declivis (Bela), Loven. Ind. Moll. Scand., p. 13, . . 218
Declivis (Pleurotoma), Martens. Conch. Mittheil., i, 39, t. 9, f. 2, ... 170
Decussata (Bela), Couth. Bos. Jour. Nat H., ii, p. 183, pl. iv, f. 8, 1839, ... 217
Decussata (Mangilia), Pease. Am. Jour. Conch., iii, p. 217, pl. 15, f. 10, ... 263
Decussata (Pleurotoma), Macgillivray. Moll. Aberdeen, p. 172. = P. Trevelyana, Turt. 221
Decussata (Pleurotoma), Phil. Moll. Sicil., ii, 174, t. 26, f. 23, 1844. = D. nuperrima, Tiberi, ... 307
Defrancia, Millet. Ann. Soc. Linn. Paris, 1826.
= Clathurella, Carp. 159
Delacouriana (Cithara), Crosse. Jour. Conch., xvii, p. 177; xx, p. 66, pl. ii, f. 4, ... 263
Delicata (Pleurotoma), Reeve. Conch. Ic., pl. 34, f. 310, . 301

Digitized by Google

PAGE.
Delicatula (Mangilia), T.-Woods. Proc. Roy. Soc. Tas., 1878, 37, ... 302
Delosensis (Pleurotoma), Reeve. Conch. Ic., pl. 40, f. 365. = P. clathrata, Marcel, ... 276
Deluta (Daphnella), Gould. Proc. Bost. Soc., vii, p. 339, . 306
Demersa (Bela), Tiberi. Jour. Conch., 1868, p. 179. = D. Mörchi, Malm. 315
Dempsta (Mangilia), Gould. Proc. Bost. Soc., vii, p. 340, . 312
Denseplicata (Pleurotoma), Dunker. Mal. Blat., xviii, p. 159, 203
Densestriata (Mangilia), C. B. Adams. Conch. Contr., p. 65. ? = M. balteata, Reeve, ... 247
Dentatum (Pleurotoma), Souvr. Jour. Conch., xvii, p. 418; xviii, p. 431, pl. xiv, f. 5, ... 305
Dentifera (Clathurella), Hinds. Moll. Voy. Sulph., p. 23, pl. 7, f. 14; Proc. Zool. Soc., 1843, p. 44, ... 291
Derelicta (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 64, 266
Desalesi (Mangilia), T.-Woods. Proc. Roy. Soc. Tasm., 1876, 138, ... 271
Deshayesii (Mangilia), Dkr. Mal. Blatt., vi, p. 228, . . 256
Deshayesii (Pleurotoma), Doumet. Mag. de Zool. Moll., 1840, pl. 11. = P. Indica, Desh.
Despecta (Defrancia), H. and A. Ad. Genera, i, 96, . . 299
Detecta (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 65, 1881, 213
Diadema (Fusus), Lesson. Sowb. Thes., iv, pl. 410, fig. 53. = Columbarium Pagoda, Lesson.
Diadema (Pleurotoma), Kien. Iconog., pl. 8, f. 2. = Clavatula muricata, Lam. 229
Didyma (Genotia), Watson. Jour. Linn. Soc., xv, 404, 1881, 175
Difficilis (Pleurotoma), Smith. Proc. Zool. Soc., 1879, p. 187, t. 19, f. 8, ... 173
Digitalis (Drillia), Reeve. Proc. Zool. Soc., 1843, p. 186, . 191
Digitalis (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 65, 268
Digna (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 499, 184
Diminuta (Pleurotoma), C. B. Ad. Conch. Contr., p. 63. = P. quadrata? Reeve, ... 278
Discors (Bela), Brown. Brit. Shells, 6, t. 5, f. 6, 7. = B. pyramidalis, Strom. 216
Discors (Pleurotoma), Sowb. Proc. Geol. Soc., 1833, p. 137, = D. aterrima, Sowb., var.
Discrepans (Bela), Brown. Brit. Conch., 6, t. 5, f. 49, 50. = B. rufa, Mont. 224
Ditoma, Bellardi. Moll. Terz. Piemonte, pt. 2, 29, 5, 1877. = Clathurella, Sect.
Diversa (Drillia), Smith. Ann. Mag. N. H., 1882, 207, . 191
Dolichotoma, Bellardi. Moll. Terz. Piemonte, pt. 2, p. 229, 1877. = Genotia, Section, ... 154

Digitized by Google

PAGE.
Donata (Drillia), Hinds. Moll. Voy. Sul., p. 22, pl. 7, f. 7; Proc. Zool. Soc., 1843, p. 43, ... 210
Donovania, Bucq., Dautz. and Dollf. Moll. Roussillon, 85, 1883. = Lachesis, Risso.
D'Orbignii (Pleurotoma , Reeve. Conch. Ic., pl. 39, f. 359, 1846. = C. candidula, Reeve, var. 278
Dormitor (Mitromorpha), Sowb. Carpenter, Ann. Mag., 182, 1865, ... 318
Dorvilliæ (Mangilia), Gray. Reeve, Pleurotoma, sp. 249, . 267
Dowsoni (Pleurotoma), S. V. Wood. = P. turricula, Mont. 219
Drillia, Gray. Ann. Mag. Nat. Hist., vol. i, 1838, p. 28, 155, 176
Dubia (Mangilia), C. B. Adams. Proc. Bost. Soc. N. H., ii, p. 4, ... 248
Dubiosa (Cythara), G. and H. Nevill. J. A. S. Beng., 1875, ii, p. 93, pl. vii, f. 18, ... 264
Dunkeri (Pleurotoma), Weinkauff. Küster's Conch. Cab., No. 86, t. 16, f. 2. = D. umbilicata, Gray.
Duplicata (Pleurotoma), Sowb. Proc. Zool. Soc., 1843. = P. olivacea, Sowb. 238
Duplicata (Pleurotoma), Weinkauff (not Sowerby). Küster, Conch. Cab., t. 10, f. 9, 11. = Drillia maura, Sowb.
Dyscrita (Pleurotoma), Watson. Jour. Linn. Soc., xv, 448, 1881, ... 315
Dysoni (Pleurotoma), Reeve. Proc. Zool. Soc., 1846, p. 4, 198
Dysoni (Mangilia), Reeve. Conch. Icon., f. 29, . . . 247

Eborea (Drillia), Gould. Proc. Bost. Soc. N. H., vol. 7, p. 337, ... 212
Ebur (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 116, . 188
Eburnea (Drillia), Cpt. Proc. Zool. Soc., 1865, p. 280, . 183
Eburnea (Pleurotoma), Bivona. Gen. posth., p. 9. = M. tæniata, Desh. 243
Echinata (Drillia), Lam. Anim. sans Vert., vii, p. 91, . 185
Echinatus (Pleurotoma), Brocc. (not Lamarck). Conch. foss. Subap., 423, t. 8, f. 3. = C. Cordieri, Payr.
Efficta (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 118. = C. vultuosa, Reeve, ... 296
Effusa (Daphnella), Carpenter. Ann. Mag. N. Hist., 3d ser., xv, 29, 1865, ... 317
Elatior (Pleurotoma), C. B. Ad. Proc. Bost. Soc., ii, p. 4, 319
Elatior (Clathurella), d'Orb. Moll. Cuba, ii, 173, t. 23, f. 35–37, ... 279
Elegans (Ancistrosyrinx), Dall. Bull. Mus. Comp. Zool., ix, 54, 1881, ... 176
Elegans (Clathurella), Pease. Proc. Zool. Soc., 1860, p. 144, 299
Elegans (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 63, . 264

Digitized by Google

PAGE.
Elegans (Defrancia), Möll. Moll. Grœnl., p. 13.
= Bela cancellata, Mighels, ... 218
Elegans (Murex), Wood. Ind. Test. Supp., pl. 5, f. 8.
= Pleurotoma fascialis, Lam.
Elegans (Pleurotoma), Brown. Conch. Gt. Brit.
= D. costulata, Blainv. 309
Elegans (Pleurotoma), Blv. (non Donov.).
= P. purpureum, Mont.
Elegans (Pleurotoma), Donovan. Brit. Shells, v, t. 179, f. 3.
= M. linearis, Mont.
Elegans (Pleurotoma), Scacchi. Cat., pl. 26, f. 5.
= D. Maravignæ, Bivona.
Elegantior (Pleurotoma), S. Wood. 1872.
= B. elegans, Möll. Jeffreys, Proc. Roy. Soc., xxv, 189.
Elongata (Pleurotoma), Anton. Verzeichniss, p. 73, . . 318
Elongata (Pleurotoma), Gray. Beechey's Voy., p. 119.
? = P. cryptorraphe, Sowb.
Elongatula (Pleurotoma), Anton. Verzeichniss, p. 74, . 318
Elusiva (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 69, 1881, 213
Emarginata (Clathurella), Donov. Brit. Shells, v, t. 169, f. 2. = D. gracilis, Montagu, ... 312
Emendata (Pleurotoma), Monterosato. Conch. St. Vito. Jour. de Conch., 1878, 157, ... 172
Enginæformis (Clathurella), G. and H. Nevill. J. A. S. Beng., 1875, ii, p. 91, pl. vii, f. 9, ... 294
Engonia (Genotia), Watson. Jour. Linn. Soc., xv, 405, 1881, 175
Ericea (Mangilia), Hinds. Voy. Sulphur Moll., p. 17, pl. 5, f. 15, ... 258
Eritima (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 443, 1881, ... 315
Eritmeta (Mangilia), Watson. Jour. Linn. Soc., xv, 432, 1881, ... 249
Erosa (Drillia), Schrenck. Amurland Moll., p. 405, t. xvii, figs. 5–7, ... 184
Erythræa (Pleurotoma), Jickeli, MS. (Kuster, t. 4, f. 10), 166
Etallonia, Deshayes. Paris Fossils, 2d edit., 605, 1862, 156, 226
Etruscum (Pleurotoma), Tiberi. Monterosato, Nuova Revista, 42. = Pl. calcarata, Grat. 312
Eucheilodon, Gabb. Jour. Acad. Philada., 2d ser., iv, 380, t. 67, f. 18. = Pleurotoma, Lam.
Eucithara, Fischer. Man. de Conch., 593, 1884.
= Cythara, Schum.
Exarata (Bela), Möll. Moll. Grœnl., p. 12.
= B. turricula, Mont. 219
Exarata (Bela), Verrill. Pro. Nat. Mus., iii, p. 366 (pars).
= B. concinnula, Verrill.

Digitized by Google

PAGE.
Exarata (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 112, . 204
Exasperata (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 63, 1881, ... 213
Exasperata (Drillia), Reeve. Conch. Icon., pl. ii, fig. 8, 1843, 185
Excavata (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 498, ... 212
Excentrica (Pleurotoma), Sowb. Proc. Zool. Soc., 1833. = D. rudis, Sowb.
Excurvata (Bela), Cpt. Proc. Acad. Nat. Sc. Phila., 1865, p. 63, ... 223
Exigua (Drillia), Homb. et Jacq. Voy. Astr. et Zel., v, 111, t. 25, f. 21, 22, ... 188
Exigua (Bela), Jeffreys. Proc. Zool. Soc., 1883, 398, t. 44, f. 10, ... 216
Exilis (Clathurella), Pease. Proc. Zool. Soc., 1860, p. 144, 299
Exilis (Drillia), Pease Am. Jour. Conch., iii, p. 220, pl. 15, f. 19, 1867, ... 206
Exilis (Pleurotoma), Phil. Zeit. Mal., 1849, p. 31, . . 299
Eximia (Clathurella), Reeve. Proc. Zool. Soc., 1843, p. 181, 290
Expansa (Bela), Sars. Moll. Norv., 240, t. 17, f 7, 1878, . 216
Exquisita (Clathurella), G. and H. Nevill. J. A. S. Beng., 1875, p. 87 (pt. ii). = M. rubida, Hinds, ... 271
Exquisita (Defrancia), Jeffreys. Ann. Mag., 33, 1882, . 299
Exquisita (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 305, 269
Exsculpta (Drillia), Watson. Jour. Linn. Soc., xvi, p. 247, 1882, ... 212
Extensa (Bela Blakeana, var.), Dall. Bull. Mus. Comp. Zool., ix, 55, ... 222

Fabagina (Pleurotoma), Adams and Reeve. Weinkauff, Cat., p. 4. = P. fagina, Ad. and Reeve.
Fagina (Pleurotoma), Adams and Reeve. Voy. Sam., p. 40, t. 9, f. 2 *a-b*, ... 167
Fairbanki (Mangilia), G. and H. Nevill. Jour. As. Soc. Ben., 1875, ii, p. 85, pl. vii, f. 2, ... 270
Fallax (Clathurella rugosa, var.), G. and H. Nevill. J. A. S. Beng., 1875, pt. ii, p. 87, ... 297
Fallax (Pleurotoma), Forbes. Rep. Æg. Invert., 139. = juv. P. gracilis, Montagu. 312
Farranii (Pleurotoma), Thomps. Ann. Nat. Hist., xv, 316, t. 19, f. 3. = D. costulata, Blainv. 309
Fascialis (Pleurotoma), Lam. An. s. Vert., vii, p. 93, . 169
Fasciata (Cythara), Gray. Reeve, Conch. Icon. Mangilia, sp. 52, ... 269
Felina (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 42; Voy. Sulph., t. 7, f. 4, ... 292

Digitized by Google

PAGE.
Fenestrata (Clathurella), Dkr. Mal. Blatt, xviii, p. 162, . 299
Fenestrata (Pleurotoma), Desh. Exp. Morée, 177.
?= D. costulata, Blainv. 309
Fenestrata (Clathurella), Reeve. Proc. Zool. Soc., 1846, p. 4, 283
Ferruginea (Clavatula), von Maltzan. Jahr. Mal. Gesell., 1883, 115, t. 3, f. 8. = Cl. muricata, Lam., var. . . 229
Ferruginea (Pleurotoma), Anton. Verzeichniss, p. 73, . 318
Ficus (Buccinum), Martyn. Univ. Conch.
= Halia Priamus, Meuschen.
Fidicula (Bela), Gould. Bost. Proc., iii, 142, 1849, . . 222
Filicincta (Mangilia), Smith. Ann. Mag. N. H., 1882, 216, 261
Filifera (Bela), Dall. Bull. Mus. Comp. Zool., ix, p. 56, 1881, 222
Filosa (Clathurella), Gould. Proc. Bost. Soc. N. H., vii, p. 338, ... 299
Filosa (Mitromorpha), Carpenter. Ann. Mag. N. Hist., 3d ser., xv, 182, 1865, ... 317
Filosa (Pleurotoma), Marrat. Quart. Jour. Conch., i, 240, 1877, ... 170
Fimbriata (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 43; Moll. Voy. Sulph., p. 22, pl. 7, f. 9, ... 288
Flammea (Pleurotoma), Hinds. Proc. Zool. Soc., 1843, p. 42; Moll. Voy. Sulph., p. 21, pl. 6, f. 21, ... 302
Flavescens (Mangilia), Angas. Proc. Zool. Soc., 1877, p. 37, pl. v. f. 11, ... 256
Flavescens (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 111, 194
Flavidula (Drillia), Lam. Anim. sans Vert., vii, p. 92, . 177
Flavocarinata (Drillia), Smith. Ann. Mag. N. H., 1882, 212, 200
Flavocincta (Pleurotoma), C. B. Ad. Conch. Contr., p. 63, 319
Flavo-nodulosa (Drillia), Smith. Proc. Zool. Soc., 1879, p. 194, t. 19, f. 21, ... 202
Flemingiana (Halia), Macgilliv. Moll. Aberd., p. 189.
= Buccinum Dalei, Sowb. 318
Flexuosa (Mangilia), Smith. Ann. Mag. N. H., 1882, 214, 261
Floridana (Mitromorpha), Dall. Proc. Nat. Mus., vi, 1883, 317
Fluctuosa (Drillia), Watson. Jour. Linn. Soc., xv, 416, 1881, 212
Folineæ (Lachesis), Ph. Moll. Sic., ii, 1844, p. 189, t. xxvii, f. 10, ... 225
Folineæ (Murex), Chiaje. Mem., t. xlix, f. 12–14.
= Lachesis minima, Mont. 225
Foraminata (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 118, ... 288
Forbesii (Pleurotoma), Reeve. Conch. Ic., pl. 37, f. 339.
?= D. brachystoma, Phil. 308
Formicaria (Mangilia), Forbes. Ægean Report, 139, 1844.
= M. nebula, Montg.
Formicaria (Mangilia), Sowb. Proc. Zool. Soc., 1833, p. 139, 250

Digitized by Google

PAGE.
Formosa (Clathurella), Jeffreys. Proc. Zool. Soc., 1883, 397, t. 44, f. 9, ... 297
Formosa (Pl. reticulata, var.), Jeffreys. Brit. Conch., iv, 371. = M. Cordieri, Payr.
Formosa (Pleurotoma), Reeve. Conch. Ic., pl. 36, f. 331; Reeve, Corrections, Conch. Icon. = D. læta, Hinds.
Forthiensis (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 114. = D. accincta, Montg. 310
Fortilirata (Drillia), Smith. Proc. Zool. Soc., 1879, p. 194, t. 19, f. 22, ... 207
Fortis (Pleurotoma), Forbes. Proc. Zool. Soc., 1844. = D. turgida, Forbes, ... 308
Foveolata (Clathurella), Reeve. Proc. Zool. Soc., 1846, p. 5, 288
Fragilis (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 111; Smith, Zool. Proc, 198, 1879. = D. Lymneiformis, Kiener, 300
Fucata (Drillia), Reeve. Proc. Zool Soc., 1845. p. 110, . 189
Fulgurans (Daphnella), Krauss. Südafrikan. Moll., p. 109, t. vi, f. 11, ... 311
Fulminata (Pleurotoma), Kiener. Icon., pl. 10, f. 2. = P. tornata, Dillw., var. 237
Fulva (Mangilia), Reeve. Proc. Zool. Soc., 1845, p. 116. = M. lutescens, Reeve, ... 253
Fulva (Drillia), Hinds. Proc. Zool. Soc., 1843, p. 44, . 210
Fulvocincta (Mangilia), G. and H. Nevill. Jour. As. Soc. Beng., 1875, ii, p. 85, pl. vii, f. 1, ... 252
Funebrale (Daphnella), Dall. Am. Jour. Conch., vii, p. 100, 1871, ... 310
Funebris (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 62, 251
Funiculata (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 60, ... 257, 267
Funiculata (Pleurotoma), Val., MSS. Kiener, Iconog., t. 16, f. 1. = P. olivacea, Sowb. 238
Funiculus (Pleurotoma), Anton. Verzeichniss, p. 73, . 318
Fusca (Bela), Brown. Brit. Shells, 6, t. 5, f. 3, 4. = B. rufa, Mont. 224
Fusca (Mangilia), C. B. Adams. Proc. Bost. Soc. N. H., ii, p. 4, ... 248
Fusca (Pleurotoma), Calcara. = Mangilia Sicula, Reeve.
Fusca (Pleurotoma), Homb. and Jacq. Voy. Sud Pol. Zool., v, p. 111, t. 25, f. 19–20. = P. gemmata, Hinds.
Fuscata (Pleurotoma), Desh. ? = D. nebula, Montg. . . 308
Fuscescens (Drillia), Gray. Reeve, Icon., sp. 125, 1843, . 193
Fuscobalteata (Clathurella), Smith. Proc. Zool. Soc., 1879, p. 196, pl. xix, f. 26, ... 284
Fuscocincta (Pleurotoma), C. B. Ad. Conch. Contr., p. 62, 319

Digitized by Google

PAGE.
Fuscoligata (Daphnella), Dall. Am. Jour. Conch., vii, p. 100, 1871, ... 301
Fuscoligata (Mangilia rigida, var.), Cpt. Proc. Zool. Soc., 1856, p. 163, ... 269
Fuscolineata (Clathurella), Dkr. Mal. Blatt., xviii, p. 162, 299
Fuscolineata (Daphnella), Smith. Dunker, Jap. Moll., 25. = D. fuscobalteata, Smith.
Fuscolineata (Pleurotoma), C. B. Ad. Proc. Bost. Soc. N. H., 1845, p. 4; Contrib. Conch., p. 54. = P. monilifera, Sowb. 278
Fuscomaculata (Clathurella), Pease. Proc. Zool. Soc., 1860, p. 144, ... 299
Fusconotata (Cithara), Cpt. Ann. and Mag. N. H., 1864, xiv, p. 46, ... 271
Fusiformis (Cithara), Reeve. Proc. Zool. Soc., 1846, p. 61, 268
Fusiformis (Daphnella), Garrett. Proc. A. N. S. Phila., 1873, p. 229, pl. 3, f. 58, ... 303
Fusiformis (Pleurotoma), C. B. Ad. Conch. Contr., p. 64, 319
Fusiformis (Pleurotoma), Anton. Verzeichniss, p. 74, . 318
Fusiformis (Pleurotoma), Requien. Coq. Corse. Suppl., 101, No. 524, bis. = P. anceps, Eichw. 313
Fusoides (Pleurotoma), Reeve. Proc. Zool. Soc., 1846, p. 6. = M. gracilenta, Reeve, ... 252

Galerita (Pleurotoma), Jeffreys (not Phil.). Brit. Conch., v, 221, t. 102, f. 6. = P. semicolon, S. Wood.
Galerita (Pleurotoma), Philippi. En. Moll. Sic., ii, 172, t. 26, f. 15, 1844, ... 309
Garnonsii (Pleurotoma). Reeve, 4, pl. 1, Conch. Ic., 1843, 163
Garrettii (Cythara), Pease. Proc. Zool. Soc., 1860, p. 147. = Columbella lachryma, Gask. Vol. v, 165.
Gealei (Daphnella), Smith. Ann. Mag. N. Hist., 1882, 302, 307
Gemmata (Pleurotoma), Hinds. Proc. Zool. Soc., 1843, p. 37, ... 173
Gemmata (Pleurotoma). MacAndrew Report. = P. amabilis, Jick.
Gemmula, Weink. Jahr. Mal. Ges., ii, p. 287, 1876. = Pleurotoma, Sect. 154, 173
Gemmulata (Pleurotoma), Desh. Conch. Reunion, p. 107, pl. xii, f. 8–10. = Mangilia interrupta, Reeve, . . 266
Genotia, H. and A. Adams, *em.* Gen. Rec. Moll. i, 89, 1853. 154, 174
Gibbera (Defrancia), Jeffreys. Brit. Assoc. Report, 1873, 114, ... 299
Gibbosa (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 61, 266
Gibbosa (Drillia), Born. Test. Mus. Cæs., t. 11, f. 12, 13, . 179

Digitized by Google

PAGE.

Gigantea (Bela), Mörch. Moll. Spitzbergen, No. 33.
= B. Schantarica, Midd.
Gigas (Pleurotoma), Beck, MSS. Verkrüsen, Jahrb. Mal. Gesell., ii, 239, t. 8, f. 6, 7, 1875.
= Bela Schantarica, Midd.
Giliberti (Borsonia), Souv. Jour. Conch., 1874, p. 189, pl. vii, fig. 2, ... 228
Gilpini (Bela), Verkr. Jahr. Mal. Gesell., v, 1878, p. 226, . 222
Ginnannia (Mangilia), Reeve (not Risso). Mangilia, f. 45.
? = Pl. septangularis, ... 223
Ginnannia (Mangilia), Risso. Eur. Merid., iv, 220, t. 7, f. 99.
= D. nebula, Montg. 307
Glareosa (Mangilia), Gould. Proc. Bost. Soc., vii, p. 340, . 271
Glumacea (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 44; Moll. Voy. Sulph., p. 24, pl. vii, f. 15, . . . 291
Glyphostoma, W. M. Gabb. Proc. Ac. N. S. Phila., iii, 270, pl. xi, f. 4, 1872; Semper, Verh. Hamburg, 199, 1875.
= Mangilia Risso, Sect. 159, 271
Godfroidi (Pleurotoma), Folin. Meleagrinicoles, p. 54, pl. v, f. 12, ... 250
Goniodes (Pleurotoma), Watson. Jour. Linn. Soc., xv, 394, 1881, ... 242
Goodallii (Mangila), Gray, MSS. Reeve (Mangilia), 58, . 260
Goreënsis (Mangilia), von Maltzan. Jahr. Mal. Gesell., 1883, 131, t. 3, f. 11, ... 246
Gouldii (Bela), Verrill. Trans. Conn. Ac., v, p. 465, pl. lvii, f. 6, 6 *a*, 1882, ... 220
Gracilenta (Mangilia), Reeve. Proc. Zool. Soc., 1843, p. 184, 251
Gracilior (Clavatula), Sowb. Proc. Zool. Soc., 1870, p. 254, 232
Gracilior (Mitromorpha), Hemphill, ... 317
Gracillima (Pleurotoma), Weink. Conch. Cab., 26, t. 5, f. 4, 5, 1876, ... 165
Gracillima (Pleurotoma), Cpt. Proc. Zool. Soc., 1856, p. 164, 174
Gracilis (Clathurella), Montagu. Test. Brit., t. 1, p. 267, pl. xv, f. 5, ... 312
Gracilis (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 60, . 267
Gracilis (Pleurotoma), Marrat. Jour. Conch., i, 240, . . 319
Gracilis (Pleurotoma), Scacchi. Cat. Conch., 13, 1836.
= P. attenuata, Montagu, ... 309
Gracilispira (Clathurella), E. A. Smith. Proc. Zool. Soc., 1879, p. 196, pl. xix, f. 25, ... 286
Gradata (Cythara), G. and H. Nevill. J. A. S. Beng., 1875, ii, p. 93, pl. vii, f. 15, ... 262
Græffei (Pleurotoma), Weink. Jahr., ii, t. 9, f. 9, 10, p. 290, 1875, ... 173

Digitized by Google

PAGE.
Grandis (Pleurotoma), Gray. Griff. Cuv. An. Kingd., pl. xxiii, f. 1, ... 163
Grandis (Pusionella), A. Adams. Zool. Proc., 73, 1853. = P. vulpina, Born, ... 235
Granicostata (Clathurella), Reeve. Conch. Icon., pl. xxxv, f. 323, 1846, ... 287
Granosa (Clathurella), Dkr. Mal. Blatt., xviii, p. 162, 1871, 295
Granulata (Nesæa), Risso. Hist., t. iv, p. 223, f. 67, 68. = Lachesis minima, Montg. 225
Granulatissima (Lachesis), Mörch. Mal. Blatt., vii, p. 103, 226
Granulatus (Fusus), Calcara. Ric. Malac., 1839, f. 10. = Lachesis Folineæ, Phil. 225
Granuliferum (Pleurotoma), Brugn., 1862. = P. brachystoma, Phil. 308
Granulosa (Drillia), Sowb. Proc. Zool. Soc., 1833, p. 139, . 196
Granulosissima (Clathurella), T.-Woods. Proc. Roy. Soc. Tasm., p. 37, 1878, ... 282, 285
Granum (Pleurotoma), Philippi. Moll. Sicil., ii, 170. = P. clathrata, Marcel, ... 276
Gratula (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 64, 1881, 213
Gravis (Pleurotoma), Hinds. Moll. Voy. Sulph., p. 16, pl. v, f. 6, ... 229
Grayi (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 114, 296
Greenlandica (Pleurotoma), Reeve. Conch. Icon., pl. xxxvii, f. 343. = B. bicarinata, Conch. 215
Griffithii (Pleurotoma), Gray. Reeve, Conch. Icon., sp. 57, 1843. = D. crenularis, Lam. 178
Gruneri (Pleurotoma), Philippi. Zeit. f. Mal., 1848, p. 12. = P. Virgo, Lam.
Guarani (Mangilia), d'Orb. Moll. Amer. Mer., p. 445, pl. lxxvii, f. 13, 14, ... 247
Guerinii (Pleurotoma), Duval. Revue Zool., 1845, p. 212, . 166
Guestieri (Pleurotoma), Souverbie. Jour. de Conch., 1872, p. 362; 1873, p. 58, pl. iv, f. 3. = M. reticulata, Reeve, 262
Guildingii (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 116, ... 279
Gypsata (Drillia), Watson. Jour. Linn. Soc., xv, 413, 1881, 212

Hædropleura, Monterosato, Bucq., Dautz. and Dollf. Moll. Roussillon, 85, 1883. = Bela, Sect. . . . 156, 223
Halia, Risso. Hist. Nat. Eur. merid., iv, 52, 1826, . 161, 318
Hamata (Mangilia), Carpenter. Ann. Mag. N. H., xv, p. 399, 1865, ... 251
Hanleyi (Cithara), Dkr. Mal. Blatt., xviii, p. 164, . . 271
Hanleyi (Drillia), Carp. Mazat. Shells, p. 398. = D. rustica, Sowb.

Digitized by Google

PAGE.
Harfordiana (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 183. = D. nigerrima, Sowb., var., ... 196
Harpa (Clathurella), Pease. Proc. Zool. Soc., 1860, p. 144, 299
Harpula (Pleurotoma), Valenc., MSS. Kiener, Iconog., 58, t. 18, f. 3. = D. harpularia, Desmoulins.
Harpularia (Bela), Couth. Bos. Jour. N. H., 11, p. 106, pl. 1, f. 10, 1838, ... 219
Harpularia (Bela), G. O. Sars. Moll. Reg. Arct. Norv., p. 234, pl. 16, f. 17, pl. ix, f. 3 *a–c*, 1878.
= B. turricula, Montg. 219
Harpularia (Drillia), Desmoulins. Revis. Pleur., p. 56, . 193
Harrisoni (Mangilia), T.-Woods. Trans. Roy. Soc. Victoria, xiv, p. 56, ... 306
Harveyi (Bela), Verkr. Jahr. Mal. Gesell., v, p. 225, 1878, 222
Hastula (Pleurotoma , Reeve. Proc. Zool. Soc., 1843, p. 187.
= P. marmorata, Lam. 165
Havanensis (Drillia), Dall. Bull. Mus. Comp. Zoo., ix, 67, 1881, ... 213
Hayesiana (Clathurella), Angas. Proc. Zool. Soc., 1871, p. 17, pl. i, fig. 17, ... 281
Hebes (Bela), Verrill. Proc. U. S. Nat. Mus., iii, p. 367.
= B. decussata, Couth., var. 217
Helicoides (Bulla), Brocchi. Conch. foss. subap., t. 1, f. 9 *a* and *b*, p. 283, 1814.
= fossil var. of Halia Priamus, Meuschen.
Hemimeres (Pleurotoma), Watson. Jour. Linn. Soc., xv, 398, 1881, ... 242
Hemphilli (Drillia), Stearns. Proc. Cal. Ac., v, p. 80, pl. 1, f. 3, ... 185, 319
Heptagona (Clathurella), Dkr. Mal. Blatt., xviii, p. 161, . 299
Heptagona (Pleurotoma), Scacchi. Notizie, 42, t. 1, f. 9.
= Pl. septangularis, Mont.
Hexagona (Mangilia), Gabb. Proc. Cal. Ac. N. S., 1865, iii, p. 185, ... 249
Hexagona (Drillia), Sowb. Proc. Zool. Soc., 1833, p. 139, 187
Hexagonalis (Mangilia), Reeve. Proc. Zool. Soc., 1845, p. 118, ... 251
Hexagonum (Pleurotoma), Pfr. Arch. f. Nat., 1840, i, p. 258, ... 299
Hindsii (Clathurella), Reeve. Proc. Zool. Soc., 1843, p. 186, 289
Hirsutum (Pleurotoma, Folin. Meleagrinicoles, 59, pl. v, f. 16, ... 270
Histrix (Defrancia), Jan. Bellardi, Mon. Pleur. Fos. Piem., 613, t. 4, f. 14. = C. Cordieri, Payr. 275
Holbolii (Bela), Beck. = Columbella rosacea, Gould. Manual, v, ... 223

Digitized by Google

PAGE.
Homotoma, Bellardi. Moll. Terz. Piemonte, pt. 2, 264, 1877. = Daphnella, Sect. 160
Hondurasensis (Drillia), Reeve. Proc. Zool. Soc., 1846, p. 4, 194
Hormophora (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 457, 1881, ... 299
Hornbeckii (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 63, 248
Hottentota (Drillia), Smith. Ann. Mag. N. H., 1882, 208, 191
Humilis (Drillia), Smith. Proc. Zool. Soc., 1879, p. 193, pl. 19, f. 20, ... 203
Hyalina (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 116, 301
Hypsela (Mangilia), Watson, Jour. Linn. Soc., xv, 433, 1881, ... 249

Igniflua (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 113, 302
Immaculata (Mangilia), T.-Woods. Roy. Soc. Tas., 1875, p. 142, ... 306
Impages (Drillia), Adams and Reeve. Zool. Voy. Samarang, p. 39, t. 9, f 1 *a*, *b*, ... 184
Imperfectum (Pleurotoma), Folin. Meleagrinicoles, p. 60, pl. v, f. 17, ... 250
Imperialis (Clavatula), Lam. Anim. s. Vert., vii, p. 91, . 229
Implicata (Clavatula), Reeve. P. Z. S., 1845, p. 110, . . 230
Impressa (Bela), Verrill. Proc. U. S. Nat. Mus., iii, p. 365, 1880. = B. incisula, Verrill.
Impressa (Bela), Beck. Mörch, Moll. Spitzb., No. 31; Ann. Soc. Mal. Belg., iv, 21, 1869, ... 220
Impressa (Drillia), Hinds. Moll. Voy. Sul., p. 21, pl. 6, f. 23, 24; Proc. Zool. Soc., 1843, p. 44, ... 189
Incerta (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 496, ... 211
Incilis (Drillia), Watson. Jour. Linn. Soc., xv, 425, . . 212
Incincta (Pleurotoma), Watson. Jour. Linn. Soc., xv, 438, 1881, ... 307
Incisa (Drillia), Cpt. Proc. Acad. Nat. Sci. Phila., 1865, p. 62, ... 182
Incisa (Pleurotoma), Reeve. Proc. Zool. Soc., 1843. = D. Maravignæ, Bivona. Reeve, Corrections.
Incisula (Bela), Verrill. Trans. Conn. Ac., v, p. 461, pl. xliii, f. 12; pl. lvii, f. 14. = B. decussata, Couth., var. 217
Inconstans (Drillia), E. A. Smith. Ann. Mag. N. H., 1875, xv, p. 417, ... 212
Incrassata (Pleurotoma), Dujardin. Mem. Geol., ii, p. 292, t. 20, f. 28. = D. Maravignæ, Bivona.
Incrassata (Pleurotoma), Sowb. Proc. Zool. Soc., 1833, p. 138. = D. Bottæ, Val. 192

Digitized by Google

PAGE.
Incrusta (Drillia), T.-Woods. Proc. Roy. Soc. Tasm., 1876, p. 136. = C. Letourneuxiana, Crosse, ... 286
Indica (Pleurotoma), Deshayes. Voy. Indes-Orient, p. 421, pl. ii, f. 9–10, ... 168
Indistincta (Mangilia), Monterosato. Nuov. Revista, p. 43; Enum. Conch., 107. ?= M. Bertrandi, Payr. . . . 244
Inepta (Mangilia), Smith. Ann. Mag. N. H., 1882, 217, . 248
Inermis (Drillia), Hinds. Proc. Zool. Soc., 1843, p. 37, . 182
Inflata (Clathurella), Crist. et Jan. Monts. Nuova Revista, 274
Inflata (Pleurotoma), Philippi. Moll. Sicil., i, 197, t. 11, f. 24. = P. Leufroyi, Michaud.
Inflexa (Clathurella), Martens. Mittheil., ii, p. 108, pl. 21, figs. 10–12, ... 280
Infrasulcata (Clathurella), Garrett. Proc. A. N. S. Phila., 1873, p. 220, pl. 2, f. 35. = C. cavernosa, Reeve, . . 290
Inquinata (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 117, ... 304
Insculpta (Mangilia), Ad. and Ang. Proc. Zool. Soc., 1863, p. 420, pl. 37, f. 8, ... 256
Insculpta (Pleurotoma), Mighels. Proc. Bost. Soc. N. H., i, p. 189, ... 319
Insignis (Pleurotoma), Jeffreys. Ann. Mag. Nat. Hist., 5 ser., xii, 120, 1883. = Pl. circinata, Dall, ... 316
Intaminata (Mangilia), Gould. Proc. Bost. Soc. N. H., 1861, p. 339, ... 271
Intercalaris (Defrancia), Cpt. Proc. Zool. Soc., 1856, p. 163, 299
Interfossa (Daphnella), Cpt. Ann. Mag. N. H., 1865, p. 29, xv, ... 310
Interlirata (Mangilia), Stearns. Proc. Cal. Ac., iv, p. 226, pl. 1, f. 10, ... 249
Intermaculata (Drillia), Smith. Proc. Zool. Soc., 1879, p. 193, pl. 19, f. 19, ... 202
Intermedia (M. linearis, var.), Forbes and Hanley, iii, 471. = M. linearis, Mont., var.
Interpunctata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, p. 207, ... 191
Interrupta (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 61, 265
Interrupta (Daphnella), Pease. Proc. Zool. Soc., 1860, p. 147, ... 307
Interrupta (Drillia), Lam. Anim. sans Vert., vii, p. 92, . 181
Interrupta (Pleurotoma), Sowb. Proc. Zool. Soc., 1833. = P. astricta, Reeve, ... 241
Interstriata (Cythara), E. A. Smith. Jour. Linn. Soc., xii, p. 538, pl. xxx, f. 11, 1876, ... 272
Interstrigata (Drillia), Smith. Ann. Mag. N. H., 1882, 208, 191

Digitized by Google

PAGE.
Intertincta (Drillia), Edg. Smith. Ann. Mag. N. H., 1877, p. 497, ... 201
Ipara (Pleurotoma), Dall. Bull. Mus. Com. Zool., ix. p. 57, 312
Isabella (Pleurotoma), Anton. Verzeichniss, p. 73, . . 318
Ischna (Pleurotoma), Watson. Jour. Linn. Soc., xv, 403, 1881, ... 242
Ishnula, Clark. = Bela, Leach.
Isseli (Cythara), G. and H. Nevill. J. A. S. Beng, 1875, ii, p. 94, pl. vii, p. 17, ... 272

Jacksonensis (Daphnella), Angas. Proc. Zool. Soc., 1877, p. 37, pl. v, fig. 10, ... 311
Japonica (Lachesis), A. Ad. Ann. Mag. N. H., 1860, v, p. 411; Zool. Proc., 1879, 198, t. 20, f. 29, ... 226
Japonica (Drillia), Lischke. Mal. Blat., xvi, p. 105; Jap. Meer. Conch., p. 32, 1869, ... 202
Japonicus (Fusus), Gray. = Columbarium Pagoda.
Javana (Pleurotoma), Kien. and Reeve (not Linn.). = P. tornata, Dill. 237
Javana (Surcula), Linn. Ed. xiii, p. 3541, ... 237
Jayana (Pleurotoma), C. B. Adams. Contr., p. 61. = D. zebra, Lam.
Jeffreysii (Drillia), Smith. Ann. Mag. N. H., 1875, xv, p. 417, ... 177
Jelskii (Pleurotoma), Crosse. Jour. de Conch., xiii, p. 33, pl. i, f. 6, 7. = P. Virgo, Lam. 168
Jenisseensis (Pleurotoma), Leche. Kongl. So. Vet. Akad. Hand. Bd. 16, No. 2, p. 56. = var. B. pyramidalis, Strom., 216
Jessoensis (Bela), E. A. Smith. Ann. Mag. N. H., 1875, xv, p. 419, ... 223
Jewetti (Clathurella), Stearns. Proc. A. N. S. Phila., 1873, p. 346, ... 277
Jickelii (Pleurotoma), Weinkauff. Conch. Cab., t. 4, f. 2, 3, 1876, ... 164
Jubata (Pleurotoma), Hinds. Proc. Zool. Soc., 1843, p. 37, 171

Kaderlyi (Surcula), Lischke. Mal. Blat., xix, p. 100, . . 239
Kennicotti (Drillia), Dall. Am. Jour. Conch., vii, p. 102, pl. 16, f. 2, 1871, ... 209
Kieneri (Pleurotoma), Doumet. Mag. de Zool. Moll., 1834, pl. x. = P. carinata, Gray.
Kieneri (Pleurotoma), Maravigna. Rev. Zool. Cuv. Soc., 1840. = B. rufa, Mont. 224
Kingensis (Daphnella), Petterd. Jour. of Conch., ii, p. 102, 306
Kobelti (Bela), Verk. Nach. Mal. Gesell., 1876, p. 17, No. 8. = B. decussata, Couth., var. 217

Digitized by Google

PAGE.
Kraussii (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 1877, p. 500, ... 234

Labecula (Mangilia), Gould. Proc. Bost. Soc. N. H., vol. 8, p. 281, ... 271
Labiosa (Clathurella), Smith. Proc. Zool. Soc., 1871, p. 731, pl. lxxv, f. 9, ... 292
Lachesis, Risso. Hist. Nat. Eur. Merid., iv, 211, 1826, . 156, 224
Lactea (Defrancia), Moller. Reeve, Icon., sp. 324. = Bela Molleri, Reeve.
Lactea (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 186. = P. tricarinata, Reeve, ... 289
Lacunosa (Clathurella), Gould. Proc. Bost. Soc. N. H., vii, 338, ... 299
Læta (Drillia), Hinds. Proc. Zool. Soc., 1843, p. 41, . . 186
Lævigata (Bela), Dall. Am. Jour. Conch., vii, p. 98, t. 16, f. 7, 1871. = B. Schantarica, Midd.
Lævigata (Pleurotoma), Phil. Enum. Mol. Sic., i, p. 199, pl. xi, f. 17, ii, 169. = D. nebula, Montg. 307
Lævior (Bela), Leche. Kongl. So. Vet. Akad. Hand. Bd. 16, No. 2, p. 55. = var. B. pyramidalis. Ström. . . . 216
Lævis (Drillia), Hutton. Cat. Mar. Moll. N. Zeal., p. 12, . 212
Lævisculpta (Taranis), Monts. Bull. Soc. Mal. Ital., vi, 75, 1880, ... 316
Lævisulcata (Crassispira), H. F. von Maltzan. Jahr. Malac. Gesell., 1883, 122, t. 3, f. 6. = D. coccinata, Reeve.
Lallemantiana (Clathurella), Crosse. Jour. de Conch., 1865, p. 423. = C. Letourneuxiana, Crosse, var., t. 11, f. 5, . 286
Lamberti (Drillia), Montr. Jour. de Conch., 2 ser., iv, 117, t. 2, f. 10, 1860, ... 198
Lamellata (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 60, 265
Lanceolata (Mangilia), C. B. Adams. Conch. Contr., p. 66, 271
Lanceolata (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 111, 181
Languida (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 115, ... 296
Laqueata (Mangilia), Reeve. Conch. Ic., f. 280, 1846, . 246
Laterculata (Pleurotoma), G. B. Sowerby. Proc. Zool. Soc., 1870, p. 253, ... 166
Latifasciata (Pleurotoma), Sowb. Proc. Zool. Soc., 1870, p. 253. = D. Japonica, Lischke.
Latisinuata (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 494, ... 177
Latizonata (Drillia), Smith. Ann. Mag. N. H., 1882, 212, 199
Lauta (Drillia), Pease. Am. Jour. Conch., iii, p. 220, pl. 15, f. 18, ... 206

Digitized by Google

PAGE.
Lavalleana (Pleurotoma), d'Orb. Moll. Cuba, ii, 174, t. 24, f. 7–9. = C. Antillarum, d'Orb. 279
La Viæ (Fusus), Calcara. Cenno sui Moll. della Sic., 37, t. 4, f. 20. = Pleurotoma anceps, Eich. 313
La Viæ (Pleurotoma), Phil. Enum. Mol. Sic., ii, p. 170, pl. xxvi, f. 9. = Pl. purpureum, Mont., ... 295
Lefebvrei (Buccinum), Maravig. Rev. Zool., 1840, p. 325. = Lachesis minima, Montagu, ... 225
Lelieuri (Clavatula), Recluz. Jour. Conch., ii, p. 210 t. 5, f. 7, 1851, ... 228
Lemniscata (Clathurella), G. and H. Nevill. J. R. A. S., Ceylon Branch, 1869. J. A. S. Beng., 1875, ii, p. 92, pl. vii, f. 11, ... 297
Lepta (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 391, 1881, ... 242
Letourneuxiana (Daphnella), Hutton. Cat. Mar. Moll. N. Z. = C. Sinclairi, E. A. Smith, ... 283
Letourneuxiana (Mangilia), Crosse. Jour. de Conch., 1865, p. 425, pl. 11, f. 7, ... 286
Leuckarti (Mangilia), Dkr. Mal. Blatt., vi, p. 228. = M. costulata, Dunker, ... 255
Leucocyma (Drillia), Dall. Proc. Nat. Mus., vi, 328, t. 10, f. 8, 1883. = D. zebra, Lam., var.
Leucolabratum (Pleurotoma), Folin. Meleagrinicoles, p. 55, pl. v, f. 13, ... 250
Leucomata (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 63, 1881, ... 213
Leucophlegma (Daphnella), Dall. Bull. Mus. Comp. Zool., ix, 70, ... 306
Leucostoma (Pleurotoma), Reeve. Conch. Ic., pl. xxxi, f. 278. = B. decussata, Couth. 217
Leucotropis (Pleurotoma), Adams and Reeve. Voy. Samarang, t. 10, f. 7. = P. oxytropis, Sowb. 169
Leufroyi (Pleurotoma), Michaud. Bull. Soc. Linn. Bord., pl. 2, f. 5 and 6, ... 276
Levidensis (Mangilia), Cpt. Proc. Acad. Nat. Sci. Phila., 1865, p. 63, ... 251
Levukensis (Mangilia), Watson. Jour. Linn. Soc., xv, p. 432, 1881, ... 261
Lienardia, Jousseaume. Bull. Soc. Zool. France, viii, xl, 1884. = Glyphostoma, Gabb, ... 271
Ligata (Mangilia), C. B. Adams. H. and A. Adams, Genera, i, 100, ... 249
Limacina (Daphnella), Dall. Bull. Mus. Comp. Zool., ix, p. 55, 102, ... 306

Digitized by Google

PAGE.
Limonitella (Drillia), Dall. Proc. Nat. Mus., vi, 329, t. 10, f. 10, 1883, ... 320
Lincta (Pleurotoma), Watson. Jour. Linn. Soc., xv, 442, 1881, ... 312
Linearis (Clathurella), Montagu. Test. Brit., p. 261, pl. 9, f. 4, ... 276
Lineata (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 63, . 253
Lineata (Pleurotoma), Lam. Anim. s. Vert., vii, p. 93, . 231
Lineolata (Lachesis), Tiberi. Jour. de Conch., 1868, p. 76, pl. v, f. 5, ... 225
Lineolata (Clathurella), Gray. Reeve, Conch. Icon., f. 337, 295
Lirata (Mitromorpha), A. Ad. Ann. Mag. N. H., 3d ser., xv, 322, 1865, ... 317
Lirata (Pleurotoma), Pease. Am. Jour. Conch., v, p. 68, 1868, ... 169
Lirata (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 117, 296
Lirata (Pusionella), A. Adams, Zool. Proc., 73, 1853.
?= P. Milleti, Petit, ... 235
Lissotropis (Pleurotoma), Dall. Bull. Mus. Comp. Zool., ix, 58, ... 312
Lithocolleta (Pleurotoma), Watson. Jour. Linn. Soc., xv, 441, 1881, ... 312
Livida (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 62, . 253
Livida (Pleurotoma), Möller. Moll. Grœnl., p. 14.
= B. bicarinata, Couth. 215
Lividus (Strombus), Linn. Syst. Nat., edit. x, 746.
? = Pleurotoma auriculifera, Lam.
Lœviana (Mangilia), Forbes. Reeve, Icon., f. 290, 1845.
= D. costulata, Blainv. 309
Longispira (Drillia), Smith. Proc. Zool. Soc., 1879, p. 190, pl. 19, f. 14, ... 202
Lophoëssa (Drillia), Watson. Jour. Linn. Soc., xvi, p. 252, 1882, ... 212
Loprestiana (Drillia), Calcara. Nuov. Sp. Conch. Sicil., 7, 1841; Monterosato, Il. de Conch., xxii, 278, . . . 209
Lota (Cythara), Gould. Proc. Bost. Soc. N. H., vii, p. 339, 271
Lucida (Mangilia), G. and H. Nevill. Jour. Asiat. Soc. Beng., 1875, pt. ii, p. 84, pl. viii, f. 15, ... 257
Luctuosa (Mangilia), d'Orb. Sagra. Hist. N. Cuba, ii, p. 172, 1846, pl. xxiii, f. 29–31, ... 246
Luctuosa (Drillia), Hinds. Proc. Zool. Soc., 1843, p. 40, . 195
Luhdorfi (Genotia), Lischke. Mal. Blätt., xix, p. 100, . 175
Lupinus (Fusus), Philippi. Abbild., iii, 118, 1850.
= Pusionella Milleti, Petit, ... 235
Lurida (Pleurotoma), Ad. and Reeve. Voy. Samarang Moll., p. 40, pl. x, f. 5. = P. Javana, Linn. . . . 237

Digitized by Google

PAGE.
Lutea (Borsonia), Pease. Zool. Proc., 143, 1860, . . 227
Lutea (Mangilia), Gould. Proc. Bost. Soc. N. H., vii, p. 340, 261
Luteofasciata (Defrancia), Hutton. Jour. de Conch., 17, 1878. = M. Sinclairi, E. A. Smith.
Luteo-fasciata (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 114. = Mangilia albovittata, C. B. Ad. . . . 248
Lutescens (Mangilia), Reeve. Corrections, Conch. Icon. . 253
Lyciaca (Bela , Forbes. Reeve, Conch. Icon., sp. 160, 1844, 221
Lymneiformis (Daphnella), Kiener. Pleurotoma, 62, t. 22, f. 3, ... 300
Lyra (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 59. = M. citharella, Lam. 257
Lyratum (Pleurotoma), Pfr. (Gm.) Kritisches Register, p. vii, ... 319
Lyrica (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 61, . 268
Lysidia (Columbella), Duclos. Chenu, Ill. Conch., t. 26, f. 15, 16, ... 198

Macandrewi (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 302, ... 307
MacCoyi (Cythara), Petterd. Jour. of Conch., ii, p. 103, . 271
Macgillivrayi (Pleurotoma), C. B. Adams. Contrib., p. 54. = Bela Trevelyana, Turton.
Macleayi (Clathurella), Brazier. Proc. Linn. Soc. N. S. Wales, i, 157, ... 299
Macra (Mangilia), Watson. Jour. Linn. Soc., xv, 437, 1881, 249
Macrostoma (Clathurella), Reeve. Conch. Ic., pl. 39, f. 362, 279
Maculata (Achatina), Swains. Exotic Conch., p. 27. = Halia Priamus, Meuschen, ... 318
Maculata (Defrancia), C. B. Adams. Conch. Contr., p. 62, 299
Maculata (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 61, 259
Maculosa (Clathurella), Pease. Proc. Zool. Soc. Lond., 1862, p. 242; Am. Jour. Conch., iii, p. 219, pl. 15, f. 16. = C. felina, Hinds, ... 293
Maculosa (Daphnella), Pease. Proc. Zool. Soc., 1860, p. 148, 307
Maculosa (Surcula), Sowb. Proc. Zool. Soc., 1833, p. 135, 236
Magellanica (Daphnella), Phil. Mal. Blatt, xv, p. 223, . 306
Magellanica (Drillia Patagonica, var.), Martens. Sitzb. Berl., 77, 1881, ... 208
Major (Drillia), Gray. Reeve, Conch. Icon., sp. 59, . . 178
Makimonos (Oligotoma), Jousseaume. Bull. Soc. Zool. France, 1883, 198, t. 10, f. 4, ... 319
Malleti (Clathurella), Recl. J. Conch., 1852, p. 254, t. 10, f. 2, 297
Mamillata (Lachesis), Risso. Hist., t. iv, p. 211, f. 65. = L. minima, Montg. 225

Digitized by Google

PAGE.
Mandarina (Pleurotoma), Smith. Marrat, Jour. of Conch., i, 240. = P. pluteata, Reeve, ... 240
Mangilia, Risso, *em.* Hist. Nat. Eur. Merid., iv, 219, 1826, 158
Mangiliella, Bucq., Dautz. and Dollf. Moll. Roussillon, 85, 1883. = Mangilia, Risso.
Mangiliinæ, ... 153
Maorum (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 1877, p. 497. = D. Buchanani, Hutton.
Maravignæ (Pleurotoma), Bivona. Gen. Posth., p. 13, . 199
Margaritifera (Mangilia), Gray. Reeve, Icon., sp. 354, 1846, 258
Marginelloides (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 60, ... 261
Mariei (Drillia), Crosse. Jour. Conch., xvii, p. 178, 1869; Jour. Conch., p. 67, pl. ii, f. 5, 1872, ... 190
Marmarina (Drillia), Watson. Jour. Linn. Soc., xv, 429, 1881, ... 191
Marmorata (Daphnella), Hinds. Moll. Voy. Sulph., p. 25, pl. 7, f. 19, ... 302
Marmorata (Pleurotoma), Brug. Enc. Meth., t. 439, f. 6. = P. tigrina, Lam.
Marmorata (Pleurotoma), Lam. Anim. s. Vert., vii, p. 95, 165
Marmorosa (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 64, 272
Martensi (Clathurella), G. and H. Nevill. J. A. S. Beng., 1875, ii, p. 91, pl. vii, f. 8, ... 291
Masoni (Clathurella), Nevill. Jour. As. Soc., 1875, t. 7, f. 7, 293
Mastersi (Drillia), Brazier. Proc. Linn. Soc. N. S. Wales, i, p. 153, 1877, ... 212
Massena (Murex), Chiaje (non Risso). Mem., t. xlix, f. 17–19. = Lachesis candidissima, Phil. 225
Maura (Pleurotoma), Kien. Coq. Viv., p. 59, pl. 23, f. 1 (not Sowb.). = D. aterrima, Sowb.
Maura (Drillia), Sowb. Proc. Zool. Soc., 1833, p. 134, . 181
Mediocris (Drillia), Desh. Moll. Reunion, p. 108, pl. xii, f. 11, 1863, ... 187
Mediofasciata (Mangilia nebula, var.), von Maltzan. Jahr. Mal. Gesell., 1883, t. 3, f. 12, p. 132. = D. nebula, Mtg. 308
Melanacme (Drillia), Smith. Ann. Mag. N. H., 1882, 213, 199
Melanostoma (Cithara), Garrett. = M. angicostata, Reeve, 252
Melatoma, Swainson. Malac., 202, 342, 1840. = Clionella, Gray.
Melchersi (Pleurotoma), Menke. Zeit. f. Mal., 1851, p. 20. = D. aterrima, Sowb.
Menkei (Pleurotoma), Anton. Verzeichniss, p. 75, . . 318
Meredithiæ (Mangilia), T.-Woods. Roy. Soc. Tas., 1875, p. 142, ... 261

Digitized by Google

PAGE.
Meridionalis (Lachesis), Smith. Proc. Zool. Soc., 1881, p. 28, pl. iv, f. 3, ... 226
Merita (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 42; Voy. Sulphur, 21, t. 6, f. 20, ... 280
Mesochilostoma, Seely. = Clavatula.
Metcalfei (Drillia), Angas. Proc. Zool. Soc., 1867, p. 113, pl. 13, f. 16. = D. Sinensis, Hinds.
Metcalfei (Mangilia), Thorpe. Brit. Mar. Conch., p. xlvi. = M. costata, Forbes and Hanley.
Metcalfei (Pleurotoma), Hanley. Petit, Shells Eur., 152. = M. nebula, Montg.
Metcalfiana (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 114, ... 288
Metula (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 44; Moll. Voy. Sulph., p. 23, pl. 7, f. 12, ... 269
Mica (Mangilia), Phil. Zeit. f. Mal., 1849, p. 31, . . 261
Micans (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 43; Moll. Voy. Sulph., p. 22, pl. 7, f. 5, ... 290
Micans (Pleurotoma), Migh. Proc. Bost. Soc. N. H., vol. ii, p. 23, ... 319
Microstoma (Drillia), Smith. Ann. Mag. N. H., 1882, 210, 199
Militaris (Drillia), Hinds. Proc. Zool. Soc., 1843, p. 38, . 181
Milium (Mangilia), Phil. Zeit. f. Mal., 1851, p. 79, . . 271
Millegrana (Daphnella), Garrett. Proc. A. N. S., Phila., 1873, p. 230, pl. 3, f. 59, ... 303
Millestriata (Mangilia), Smith. Ann. Mag. N. H., 1882, 217, 248
Milleti (Pusionella), Petit. Jour. de Conchyl., ii, 77, t. 1, f. 6, 1851, ... 235
Mindanensis (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 493, ... 211
Minima (Bela), Brown. Brit. Conch., 6, t. 5, f. 35, 36. ? = B. rufa, Montg. 224
Minima (Lachesis), Montagu. Test. Brit., tab. viii, f. 2, 1803, 224
Minor (Defrancia), C. B. Adams. Proc. Bost. Soc. N. H., ii, p. 4, ... 299
Minuta (Pleurotoma), Forbes. Reeve, Icon. sp., 158, 1844, 309
Minuta (Drillia), T.-Woods. Proc. Roy. Soc. Tas., 1876, p. 136, ... 210
Minutissima (Drillia), Garrett. Proc. A. N. S. Phila., 1873, p. 218, pl. ii, f. 30, ... 207
Minutistriata (Mangilia), Smith. Ann. Mag. N. H., 1882, 213, 261
Minutum (Pleurotoma), Aradas, 1847. = P. anceps, Eich.
Mitræformis (Genotia), Wood. Index. Test. Sup., pl. v, f. 5, 174
Mitræformis (Zafra), A. Adams. Ann. Mag. N. H., 1860, vi, p. 332, ... 313

Digitized by Google

PAGE.
Mitralis (Bela), Ad. and Ang. Proc. Zool. Soc., 1863, p. 420, 223
Mitrella (Genotia), Dall. Bull. Mus. Comp. Zool., ix, p. 56, 1881, ... 175
Mitromorpha, A. Ad. Ann. Mag. N. H., 1865, xv, p. 322. = S. G. of Daphnella, ... 161, 317
Mitrula (Bela), Verrill. Proc. Nat. Mus., iii, p. 366. = B. concinnula, var. acuta, Verrill, ... 221
Mitrula (Pleurotoma), Lovén. Sars, Moll. Norv., 233, t. 23, f. 9. ? = B. turricula, Montg. 219
Mitrus (Murex), Wood. Ind. Test. Sup., pl. v, f. 5. = Pleurotoma muricata, Lam.
Modesta (Clathurella), Angas. Proc. Zool. Soc., 1877, p. 38, pl. v, f. 15, ... 285
Modesta (Pleurotoma), Sowb. Proc. Zool. Soc., 136, 1833. = P. cincta, Lam. 242
Modesta (Pleurotoma), Weinkauff. Küster, Conch. Cab., 44, t. 9, f. 9. = P. astricta, Reeve, ... 241
Modica (Mangilia), Smith. Ann. Mag. N. H., 1882, 213, . 261
Modiolus (Pleurotoma), Jan. Cat., p. 10, n. 17, 1832. = Spirotropis carinata, Phil. 213
Mœsta (Drillia), Cpr. Ann. and Mag. N. H., 3d ser., xv, 1865, p. 366, ... 183
Molleri (Pleurotoma), Reeve. Conch. Icon., pl. xxxv, f. 324, 1846. ? = B. concinnula, Verrill, ... 221
Monastiche (Pleurotoma), Menke, MS. in coll. et litt. = P. pulchra, Gray.
Monile (Clavatula), Valen. Kien., Coq. viv., p. 52, t. 15, f. 3, ... 232, 242
Monilifera (Columbella), Sowb. Zool. Proc., 1844; Man. Conch., v, 149. = Clathurella, ... 278
Monilifera (Turris), Pease. Proc. Zool. Soc., 1860, p. 398; Am. Jour. Conch., v, 68, 1870. = P. gemmata, Hinds.
Moniliger (Pleurotoma), Cantraine. Petit, Cat. Shells Eur., 154. = D. Loprestiana, Calcara.
Moniliopsis, Conrad. Am. Jour. Conch., i, 143, 1865. = Drillia.
Monoceros (Pleurotoma), Watson. Jour. Linn. Soc., xv, 449, ... 315
Montereyensis (Drillia), Stearns. Proc. Cal. Ac. N. S., v, p. 80, pl. i, f. 2, ... 184
Montrouzieri (Mangilia), Souv. Jour. Conch., 2d ser., iv, 370; 3d ser., i, 275, pl. xi, f. 7, ... 273
Moquiniana (Drillia), Montr. Jour. Conch., 1874, p. 193, pl. vii, f. 5, ... 207
Morchi (Pleurotoma), Leche. Kongl. Sv. Vet. Akad. Hand., 16, ii, p. 57, t. 1, f. 18. = Bela Schantarica, Midd.

Digitized by Google

PAGE.
Mörchi (Pleurotoma), Malm. Goteborgs. Vet. o Vitt. Samh. Hdl., 1863, viii, t. 2, fig. 15, ... 315
Moretonica (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 299, ... 299
Morra (Pleurotoma), Dall. Bull. Mus. Comp. Zool., ix, 69, 1881, ... 213
Mucronata (Drillia), Reeve. Proc. Zool. Soc., 1846, p. 4, . 198
Multicostata (Bela), Verkr. Jahr. Mal. Gesell., v, p. 227, 1878, ... 222
Multilineare (Pleurotoma), Brown. = M. linearis, Mont.
Multilineata (Mangilia), C. B. Adams. Proc. Bost. Soc. N. H., ii, p. 3. = M. polyzonata, H. and A. Ad. . . 248
Multilineolata (Raphitoma), Brusina. Contr., p. 65. = Mangilia rugulosa, Phil.
Multilineolata (Mangilia), Desh. Exp. Moree, pl. 19, f. 46, 244
Multilirata (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 496, ... 211
Multiplicata (Pleurotoma), Forbes. Reeve, Conch. Ic., pl. 40, f. 364. = Lachesis minima, Montg. 225
Multiseriata (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 1877, p. 471, ... 174
Muricata (Clavatula), Lam. An. s. Vert., vii, p. 91, . . 229
Muricoides (Mangilia), C. B. Adams. Contr. Conch., 65, . 248
Muricoides (Pleurotoma), Blv. Faune Franc., iii, t. 4, f. 7. = P. linearis, Mont.
Mutica (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 43; Moll. Voy. Sulph., pl. 7, f. 10, ... 286
Mystica (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 183. = Clavatula muricata, Lam. 229

Nagasakiensis (Clathurella), Smith. Proc. Zool. Soc., 1879, p. 190, t. 19, f. 13, ... 286
Nana (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 65. = M. cincta, Reeve, ... 259
Nana (Pleurotoma), Monterosato. Nuova Revista, 43. = Mangilia Vauquelini, Payr., var. 243
Nana (Thesbia), Lovén. Ind. Moll. Scand., 12, . . . 315
Nanum (Pleurotoma), Scacchi. Cat., pl. 26, f. 11. = D. turgida, Forbes, ... 308
Nassoides (Pleurotoma), Gray. Reeve, Pleurotoma, sp. 259, ... 296
Nebula (Pleurotoma), Montagu. Test. Brit., 267, pl. 16, f. 6, 1883, ... 307
Nebulosa (Borsonia), Pease. Zool. Proc., 143, 1860, . . 228
Neglecta (Defrancia), C. B. Ad. Panam. Sh., 149, 1852. = C. despecta, H. and A. Ad. 299

Digitized by Google

PAGE.
Neglecta (Mangilia), Hinds. Moll. Voy. Sul., p. 20, pl. 6, f. 14, ... 267
Nelliæ (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 1877, p. 489, ... 174
Neæra, Risso. Nat. Hist. Eur. Merid., iv, 223, f. 69, 1826; Tiberi, Jour. de Conch., 74, 1868. = Lachesis, Risso.
Netrum, Philippi. Abbild., iii, 118, 1850.
= Pusionella, Gray.
Nexa (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 117, 287
Nifat (Pusionella), Brug. Dict., No. 56, ... 235
Nigerrima (Drillia), Sowb. Proc. Zool. Soc., 137, 1833, . 196
Nigra (Bela), Mich. Gal. Douai., 1, 446, t. 35, f. 5, 6.
= B. rufa, Mont. 224
Nigrescens (Pleurotoma), C. B. Adams. Proc. Bost. Soc. N. H., Jan., 1845, p. 3. = D. fuscescens, Gray.
Nigrescens (Pleurotoma), Gray. Reeve, Icon., sp. 235, Nov., 1845. = P. nigrescens (C. B. Ad.). Contr., 54.
Nigrocincta (Borsonia), Montrouzier. J. de Conch., 1872, p. 362, and 1873, pl. iv, fig. 2, p. 56, ... 228
Nigrozonata (Pleurotoma), Weinkauff. Küster, Conch. Cab., 66, t. 13, f. 2. = D. unizonalis, Lamarck.
Niponica (Pleurotoma), Smith. Proc. Zool. Soc., 1879, p. 187, t. 19, f. 7, ... 172
Nitens (Mangilia), Cpt. Ann. Mag. N. H., 1865, xv, p. 394.
= D. variegata, var., Cpt. 300
Nitens (Mangilia), Hinds. Moll. Voy. Sulph., p. 20, pl. 6, f. 17. Proc. Zool. Soc., 1843, p. 41, ... 253
Nitida (Drillia), Kiener. Iconog., pl. 27, f. 4, . . . 199
Nitida (Pleurotoma), Sowb. Proc. Zool. Soc., 1833.
= P. variculosa, Sowb.
Nivalis (Bela), Loven. Index Moll. Scand., 14, . . 223
Nivea (Pleurotoma), Phil. Zeit. f. Mal., 1851, p. 92, . . 319
Nivea (Turris), Martini. Conch. Vol., iv, 143.
= Pleurotoma Virgo, Wood.
Nobilis (Bela), Möll. Moll. Grœn., p. 12.
= B. turricula, var., Mont. 219
Nobilis (Pleurotoma), Hinds. Moll. Voy. Sulph., pl. 5, f. 1 and 2. = P. oxytropis, Sowb.
Nodata (Drillia), C. B. Adams. Conch. Contr., p. 64, . 200
Nodifera (Drillia), Pease. Proc. Zool. Soc., 1860, p. 145, . 212
Nodifera (Pleurotoma), Lam. Anim. s. Vert., vii, p. 96.
= P. Javana, Linn. 237
Nodilirata (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 494, ... 211
Nodosum (Pleurotoma), Folin. Meleagrinicoles, p. 58, pl. v, f. 15, ... 299

Digitized by Google

PAGE.
Nodulosa (Drillia), Pease. Proc. Zool. Soc., 1862, p. 279, 212
Nodulosa (Raphitoma), Jeffreys. Rept. Brit. Assoc., 113, 1873, ... 312
Normalis (Bela Blakeana, var.), Dall. Bull. Mus. Comp. Zool., ix, 54, 1881, ... 222
Novæ-Hollandiæ (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 62, ... 266
Novæ-Zelandiæ (Drillia), Reeve. Conch. Ic., sp. 143, 1843, 184
Novaja-semljensis (Bela), Leche. Kgl. Sv. Vet. Akad., Handlingar xvi, 2, 53, t. 1, f. 15, ... 215
Nucleata (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 62, 1881, ... 212
Nuperrima (Mangilia), Tiberi. Des. Nuov. Test. Medit., p. 14, pl. 2, f. 9, ... 307
Nux (Clionella), Reeve. Proc. Zool. Soc., 1845, p. 112, . 233

Obeliscus (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 64. = M. hexagonalis, Reeve, ... 251
Obeliscus (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 110, 205
Obesa (Clathurella), Garrett. Proc. Acad. Nat. Sci. Phila., 1873, p. 221, pl. 2, f. 36, ... 273
Obesa (Mangilia), Reeve. Conch. Icon., errata, . . 262
Obesa (Pleurotoma), Reeve. Proc. Zool. Soc., 33, 1843, . 231
Obesicostata (Pleurotoma), Reeve. Conch. Ic., pl. xxxix, f. 265. = Mangilia Guarani, Orb. 247
Obliqua (Bela), Sars. Moll. Norv., 226, t. 16, f. 6, 1878, . 219
Obliqua (Pleurotoma), Anton. Verzeichniss, p. 73, . . 318
Obliquata (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 115. Smith, Zool. Proc., 1879, p. 191, ... 203
Obliquicostata (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 110, ... 204
Oblongus (Murex), Brocchi. Conch. foss. subap., 430, t. 9, f. 19. = P. gracilis, Mont. 312
Obnubila (Pleurotoma), Migh. Proc. Bost. Soc. N. H., 1848, p. 24, ... 319
Obtusa (Clathurella), Reeve. Proc. Zool. Soc., 1846, p. 6, 294
Obtusicostata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 304, ... 274
Obvelata (Drillia), Carpenter. = D. nigerrima, Sowb., var.
Occata (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 41, 280
Occidentalis (Clathurella), Reeve. Conch. Ic., pl. 39, f. 357, 279
Ocellata (Lienardia), Jousseaume. Bull. Soc. Zool. France, viii, xl, 1884, ... 274
Octangulata (Clathurella), Dkr. Mal. Blatt., vi, p. 234, . 283
Oleacina (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 66, 1881, ... 213

Digitized by Google

PAGE.
Oligotoma, Bellardi. Moll. Terz. Piemonte, pl. 2, p. 235, 1877. = Genotia, Section, ... 154
Olivacea (Surcula), Sowb. Proc. Zool. Soc., 1833, p. 136, 237
Olyra (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 112, 306
Onager (Mangilia), Souverbie. Jour. Conch., 1875, p. 286, pl. xiii, f. 4, ... 272
Opalina (Mangilia), Smith. Ann. Mag. N. H., 1882, 215, . 261
Opalus (Mangilia), Reeve. Proc. Zool. Soc., 1845, p. 116, . 253
Ornata (Citharopsis), Pease. Am. Jour. Conch., iv, 97, 1868. = Columbella Garretti, Tryon. Vol. v, 166.
Ordinaria (Mangilia), Smith. Ann. Mag. N. H., 1882, 216, 250
Ornata (Pleurotoma), d'Orb. Ramon de la Sagra's Cuba, ii, p. 171, t. 23, f. 26–28. = D. zebra, Lam.
Ornata (Pleurotoma), Hinds. Moll. Voy. Sulph., p. 25, pl. 7, f. 21, ... 302
Oryza (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 46; Moll. Voy. Sulph., p. 26, pl. ix, f. 4, ... 259
Ostrearum (Drillia), Stearns. Proc. Bost. Soc. N. H., xv, p. 22, 1872, ... 197
Otocheilus, Conrad. Am. Jour. Conch., i, 24, 1865. = Cythara.
Ovalis (Bela), Friele. Prel. Rept. Moll Norw. Exp., p. 9, 1876; Jahr. Mal. Ges., 4, 263, ... 223
Owenii (Surcula), Gray. Reeve, Conch. Icon., sp. 70, 1843, 242
Oxyclathrus (Clathurella), Martens. Mitth.. i, p. 41, pl. 9, f. 1, 283
Oxytropis (Pleurotoma), Sowb. Proc. Zool. Soc., 1833, . 168

Pachia (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 460, 1881, ... 299
Paciniana (Pleurotoma), Calcara. Ricer. Malacol. Palermo, 1839, p. 7, f. 2; 243
Packardii (Pleurotoma), Verrill. Am. Jour. Sc., v, p. 15, 1872, ... 316
Pæteliana (Pleurotoma), Weinkauff. Conch. Cab., 61, pl. 12, f. 7, 8, ... 169
Pagoda (Pleurotoma), Reeve. Proc. Zool. Soc., 1846, p. 5. = D. turris, Reeve.
Pagodoides (Fusus), Watson. Jour. Linn. Soc., xvi, 382, 1882. = Columbarium, ... 320
Pagoda (Columbarium), Lesson. Ill. Zool., pl. 40, 1831, . 175
Pagoda (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 114, . 210
Palliata (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 111, . 204
Pallida (M. linearis, var.), Forbes and Hanley, iii, 472. = M. linearis, Mont., var.
Pallida (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 63, . 254
Pallida (Drillia), Sowb. Proc. Zool. Soc., 1833, p. 137, . 196

Digitized by Google

PAGE.
Pandionis (Pleurotomella), Verrill. Proc. U. S. Nat. Mus., iii, p. 368, 1880, ... 316
Papalis (Pleurotoma), Reeve. Proc. Zool. Soc., 1843. = G. Mitræformis, Wood, ... 175
Papillaris (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 42, 256
Papillosa (Drillia), Garrett. Proc. A. N. S. Phila., 1873, p. 218, pl. 2, fig. 29, ... 207
Papuensis (Clathurella), Tap.-Can. Bull. Soc. Zool. Fr., iii, p. 247, ... 299
Papyracea (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 450, 1881, ... 315
Paradoxa (Belomitra), Fischer. Jour. Conch., 1882, p. 275, 224
Pardalis (Drillia), Hinds. Moll. Voy. Sulph., 22, pl. 7, f. 1; Proc. Zool. Soc., 1843, p. 42, ... 195
Paria (Pleurotoma), Reeve. Proc. Zool. Soc., 1846, p. 5. = D. fucata, Reeve.
Partita (Pleurotoma), Reeve. Conch. Ic., pl. 36, f. 330. = P. striata, Hinds.
Parvula (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 115, 288
Patagonica (Drillia), d'Orb. Moll. Am. Mer., 446, pl. 77, f. 15, 16; Martens, Mittheil., i, 36, t. 8, f. 3, ... 208
Patruelis (Clavatula), E. A. Smith. Ann. Mag. N. H., xv, p. 419, 1875; Zool. Proc., 188, t. 19, f. 10, 1879, . . 230
Patula (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 113. = D. Lymneiformis, Kiener, ... 300
Paucicostata (Cithara), Pease. Am. Jour. Conch., iii, p. 217, 1867, ... 271
Paucicostata (Clathurella), Pease. Proc. Zool. Soc., 1860, p. 144, ... 299
Paupera (Surcula), Watson. Jour. Linn. Soc., xv, 411, 1881, 239
Paxillus (Drillia), Reeve. Proc. Zool. Soc, 1845, p. 117 . 194
Payraudeauti (Pleurotoma), Weink. Conch. Mittelm., ii, 137. = D. attenuata, Mont. 309
Peaseana (Pleurotoma), Dunk. Mal. Blätt., xviii, p. 158, . 165
Pasei (Clathurella), Nevill. Jour. As. Soc. Beng., 1875, pt. 2, 87. = M. rubida, Hinds, ... 271
Pelagia (Pleurotoma), Dall. Bull. Mus. Comp. Zool., ix, 61, 312
Pellis-phocæ (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 115, ... 225
Pellucida (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 64, 266
Pellyi (Mangilia), Smith. Ann. Mag. N. H., 1882, 218, . 261
Pelorius (Pleurotoma), Chiereghini. = P. gracilis, Montagu, ... 312
Penicillata (Pleurotoma), Cpr. Jl. de Conch, xiii, p. 146, 1865. = D. inermis, Hinds, ... 182

Digitized by Google

PAGE.
Pentagonalis (Mangilia), Gray. Reeve, Concli. Icon., sp. 255, 1845, ... 246
Peradmirabilis (Drillia), Smith. Proc. Zool Soc., 1879, p. 189, t. 19, f. 12, ... 201
Peregrina (Clathurella), Gould. Proc. Bost. Soc. N. H., 1861, 337, ... 299
Peripla (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 68, 1881, 213
Perlata (Lachesis), Morch. Mal. Blatt., vii, p. 104, . . 226
Perlata (Pleurotoma), Lesson. Revue Zool., 1842, p. 143, . 319
Perlatum (Pleurotoma), Requien. Coq. Corse, p. 75, 101. = Lachesis minima, Montg. 225
Perparva (Pleurotoma), Watson. Jour. Linn. Soc., xv, 469, 1881, ... 299
Perpauxilla (Pleurotoma), Watson. Jour. Linn. Soc., xv, 468, 1881, ... 299
Perplexa (Clathurella), G. and H. Nevill. J. A. S. Beng., 1875, pt. ii. p. 89, pl. vii, f. 5, ... 293
Perron (Murex), Chemn. Conch., x, pl. 164, f. 1573, . . 232
Perrona, Schumacher. Essai Nov. Syst., 218, 1817. = Clavatula, S. G. 157, 231
Perronii (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 183. = Clavatula perron, Chemn. 232
Perversa (Surcula), Gabb. Proc. Cal. A. N. S., 1865, p. 183; Pal. Cal., ii, 6, t. 1, f. 10, ... 239
Pessulata (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 63, 260
Pessulata (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 185, ... 311
Petitii (Pleurotoma), Maravigna. Rev. Zool. Cuv. Soc., 1840. = B. secalina, Phil. 223
Phæacra (Drillia), Watson. Jour. Linn. Soc., xv, 423, 1881, 212
Phallus (Buccinum), Gmelin. Linn., ed. xiii, p. 3503. = P. sinuata, Born.
Philberti (Pleurotoma), Michaud. Bull. Soc. Linn. Bord., pl. 3, f. 2 and 3. = P. purpureum, Mont. . . . 275
Philipineri (Pleurotoma), T.-Woods. Proc. Roy. Soc. Tas., 1876, p. 136, ... 167
Philippiana (Daphnella), Dkr. Mal. Blatt, xviii, p. 164. = D. delicata, Reeve, ... 301
Philippii (Raphitoma), Weink. M. M. Conch., ii, p. 145. = Pleurotoma Sicula, Reeve.
Philippinensis (Clathurella), Reeve. Proc. Zool. Soc., 1843, p. 184, ... 287
Philomena (Clathurella), T.-Woods. Roy. Soc. Tasm., 1875, p. 141, ... 299
Pica (Drillia), Reeve. Proc. Zool. Soc., 1843, p. 181, . . 190
Picta (Clathurella), Dkr. Mal. Blatt., xviii, p. 160, . . 293

Digitized by Google

PAGE.
Picta (Mangilia), Ad. and Ang. Proc. Zool. Soc., p. 419, 1863, pl. 37, f. 7, ... 256
Picta (Pleurotoma), Beck, MSS. Mus. King. Denmark; Reeve, Conch. Icon., f. 16, 1843, ... 163
Picturata (Pleurotoma), Weinkauff. Conch. Cab., 73, pl. 2, f. 10, pl. 14, f. 1–3, 1876, ... 164
Pingelii (Bela), Möller. Ind. Moll. Grœnl., p. 13, 1842, . 217
Pinguis (Clathurella), Garrett. Proc. A. N. S. Phila., 1873, p. 221, pl. 2, f. 38. = C. Malleti, Recluz, . . . 297
Piperata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 298, 299
Planilabroides (Mangilia), Tryon, ... 263
Planilabrum (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 63. = M. planilabroides, Tryon, ... 263
Planilabrum (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 182, ... 263
Platamodes (Pleurotoma), Watson. Jour. Linn. Soc., xv, 447, 1881, ... 315
Platia (Drillia), Watson. Jour. Linn. Soc., xvi, 253, 1882. = D. lophoessa, var.
Platycheila (Mangilia), Smith. Ann. Mag. N. H., 1882, 214, ... 261
Platystoma (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 1877, p. 501, ... 234
Plebeia (Pleurotoma) Watson. Jour. Linn. Soc., xv, 395, . 242
Pleurotoma, Lamarck. Prodrom., 1799, . . . 154, 162
Pleurotomaria (Bela), Couth. Bost. Jour. N. H., ii, p. 107, pl. 1, f. 9, 1838. = B. pyramidalis, Strom. . . . 215
Pleurotomella, Verrill. Am. Jour. Sc., 3d ser., v, p. 15, 1873. = Daphnella, Sect. 161, 316
Pleurotomidæ, ... 151
Pleurotominæ, ... 153, 162
Plicata (Clathurella), C. B. Adams. Bost. Jour. Nat. H., iii, p. 318, pl. 3, fig. 6, ... 277
Plicatum (Pleurotoma), Phil. En. Moll. Sic., i, p. 118, t. 9, f. 15. = Mangilia Sicula, Reeve, juv. 244
Plicifera (Pleurotoma), Wood. Crag. Moll., i, p. 64. t. vii, f. 15; Leche. Kongl. Sv. Vet. Akad. Handlingar, Bd. 16, No. 2, 58, ... 222
Plicosa (Pleurotoma), C. B. Adams. Contrib., p. 54. = C. plicata, C. B. Adams, ... 277
Plumbea (Pleurotoma), Hinds. Proc. Zool. Soc., 1843, p. 41, 300
Pluricarinata (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 117, ... 304
Pluteata (Surcula), Reeve. Proc. Zool. Soc., 1843, p. 183, 240
Polita (Pleurotoma), Brusina. Verh. zool.-bot. Ges. Wien, 1865. = M. nebula, Montg.

Digitized by Google

PAGE.
Polita (Pleurotoma), Hinds. Proc. Zool. Soc., 1843, p. 43, 311
Polita (Zafra), G. and H. Nevill. Jour. As. Soc. Beng., 1875, ii, p. 97, pl. viii, f. 5, ... 314
Polygonalis (Drillia), Weinkauff. Küster, Conch. Cab., 119, t. 21, f. 7, 9, ... 187
Polynesiensis (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 119, ... 291
Polytorta (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 61, 1881, 212
Polyzonata (Mangilia), H. and A. Ad. Genera, i, . . 248
Polyzonatum (var. of Pleurotoma minutum), Brugnone. Pleur. foss., t. 1, f. 10. = P. anceps, Eich. . . . 313
Ponderosa (Mangilia), Reeve. Conch. Icon., pl. vi, f. 44, . 262
Pouloensis (Oligotoma), Jousseaume. Bull. Soc. Zool. France, 1883, 199, ... 319
Pourtalesii (Pleurotoma), Dall. Bull. Mus. Com. Zool., ix, 60, 312
Prattii (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 498, 212
Priamus, Beck. Deshayes, Lam. edit., ii, viii, 299, 1838. = Halia, Risso.
Priamus (Halia), Meuschen. Cat. Mus. Gronov., No. 1355, 1778, ... 318
Priapus (Helix), Gmel., p. 3654, No. 198, 1788. = Halia Priamus, Meuschen, ... 318
Prismatica (Pleurotoma), Brugnone. = P. costata, Forbes and Hanley.
Producta (Clathurella), Pease. Proc. Zool. Soc., 1860, p. 143, 298
Pruina (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 453, 315
Pseudo-carinata (Mangilia), Reeve. Proc. Zool. Soc., 1845, p. 115, ... 254
Pseudotoma, Bellardi. Moll. Terz. Piemonte, pt. 2, p. 209, 1877. = Genotia, Section, ... 154
Pudens (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 461, 1881, ... 299
Pudica (Drillia), Hinds. Moll. Voy. Sulph., p. 20, pl. 6, f. 11, 12; Proc. Zool. Soc., 1843, p. 41, ... 189
Pulchella (Clathurella), Garrett. Proc. A. N. S. Phila., 1873, p. 219, pl. 3, f. 32. = C. purpurascens, Dunker, . . 298
Pulchella (Clathurella), Pease. Proc. Zool. Soc., 1860, p. 144, ... 299
Pulchella (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 61, 265
Pulchella (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 111, . 186
Pulchella (Taranis), Verrill. Proc. U. S. Nat. Mus., iii, p. 368, 1880; Trans. Conn. Acad., v, 487, t. 57, f. 17, . . 315
Pulcherrima (Clathurella), H. Adams. Proc. Zool. Soc., 1872, p. 14, pl. iii, f. 26, ... 289
Pulchra (Pleurotoma), Gray. Reeve, Icon., sp. 351, 1846. = D. zebra, Lam.

Digitized by Google

PAGE.
Pulla (Bela), Reeve. Adams' Genera, i, 921, ... 223
Pumila (Pleurotoma), Migh. Proc. Bost. Soc., p. 23, 1845, 298
Punctata (Clathurella), Dkr. Mal. Blatt., xviii, p. 163, . 299
Punctata (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 111.
= P. tuberculata, Gray, ... 237
Punctata (Pleurotoma), Schubert et Wagner. Suppl., p. 155, pl. 234, f. 4103, *a*, *b*. = P. tigrina, Lam.
Punctatostriata (Drillia), Carpenter. Proc. Zool. Soc., 1856, p. 164, ... 213
Puncticincta (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 115, ... 290
Punctifera (Clathurella), Garrett. Proc. A. N. S. Phila., 1873, p. 222, pl. 2, f. 39, ... 293
Pungens (Clavatula), Gould. Proc. Bost. Soc. N. H., 1861, 339, ... 299
Pungens (Pleurotoma), Monterosato.
= C. Cordieri, Payr., var. 275
Pupoidea (Zafra), H. Adams. Proc. Zool. Soc., 1872, p. 14, pl. iii, f. 27, ... 314
Pura (Mangilia), Gould. Proc. Bost. Soc. N. H., 1861, 339, 306
Pura (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 64, . 254
Purpurascens (Clathurella), Dkr. Mal. Blatt., xvii, p. 160, 1871, ... 298
Purpurata (Pleurotoma), Souv. J. C., 2d ser., iv, 370, 1860; 3d ser., i, 276, pl. 11, f. 8, 1861, ... 298
Purpurea (Clathurella), Mont. Test. Brit., 260, t. 9, f. 13, 275
Pusilla (Bela), var. of B. decussata, Couth. Verrill, Tr. Conn. Ac., v, 481.
Pusilla (Borsonia), Dkr. Mal. Blatt., xviii, p. 163, . . 228
Pusilla (Cythara), Pease. Proc. Zool. Soc., 1860, p. 147, . 271
Pusilla (Drillia), Garrett. Proc. A. N. S. Phila., 1873, p. 219, pl. ii, f. 31. = D. exilis, Pease.
Pusilla (Mangilia), Reeve. Zool. Proc., 63, 1846.
= M. funebris, Reeve, ... 251
Pusillum (Pleurotoma), Scacchi. Cat., p. 13, pl. xxvi, f. 2.
= Mangilia multilineolata, Desh.
Pusio (Buccinum), Born. Mus. Cæs., p. 316.
= Pusionella Nifat, Brug. 235
Pusionella, Gray. Proc. Zool. Soc., 137, 1847, . . 158, 234
Pustulata (Clathurella), Angas. Proc. Zool. Soc., 1877, p. 38, pl. v, f. 14, ... 285
Pustulosum (Pleurotoma), Folin. Meleagrinicoles, p. 56, pl. v, f. 1, ... 298
Putillus (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 113, . 200
Pygmæa (Bela), Verrill. Trans. Conn. Ac., v, p. 460, pl. lvii, f. 8. = B. decussata, Couth., var. 217

Digitized by Google

PAGE.
Pygmæa (Clathurella), C. B. Adams. Conch. Contr., p. 63, 299
Pygmæa (Drillia), Dunker, ... 206
Pygmæa (Mangilia), Dkr. Moll. Japon., t. 1, f. 8, . . 257
Pyramidalis (Bela), Ström. Nov. Act. Dan., iii, p. 296, f. 22, 215
Pyramidalis (Mangilia), Reeve Iconica, pl. v, f. 13, . . 261
Pyramidata (Drillia), Kiener. Coq. viv., 57, t. 21, f. 3, . 205
Pyramidatus (Fusus), Brown. Illust. Conch. Gt. Brit., 7, t. 5, f. 8, 9, 1827. = Pleurotoma nebula, Montagu.
Pyramidula (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 115, ... 286
Pyramis (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 42, 253
Pyrrha (Drillia), Watson. Jour. Linn. Soc., xv, 409, 1881, 182

Quadrata (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 114, 278
Quadrifasciata (Drillia), Gray. Reeve, Icon., sp. 251, 1845, 195
Qradrilineata (Defrancia), C. B. Adams. Conch. Contr., p. 64. ? = M. trilineata, C. B. Ad. 248
Quadrilirata (Drillia), Smith. Ann. Mag. N. H., 1882, 208, 191
Quadrillum (Pleurotoma), Dujardin. Mem. Geol., iii, 291, t. 20, f. 23. = C. clathrata, Marcel, . ? . . 276
Quadruplex (Pleurotoma), Watson. Jour. Linn. Soc., xvi, p. 253, 1882, ... 234
Quisqualis (Mangilia), Hinds. Moll. Voy. Sulph., p. 19, pl. vi, f. 5; Proc. Zool. Soc., 1843, p. 44, ... 257
Quoyi (Pleurotoma), Desh. Lam., 2d ed., ix, p. 346. = D. Novæ-Zelandiæ, Reeve
Quoyi (Pleurotoma), Desmoulins. Rev. de Pleu., p. 61. = P. monile, Val. 232
Quoyi (Pleurotoma), Reeve. Conch. Icon, sp. 137, . . 242

Radula (Surcula), Hinds. Moll. Voy. Sulph., p. 16, pl. 5, f. 9, 62; Proc. Zool. Soc., 1834, p. 16, ... 242
Radulæformis (Pleurotoma), Weink. Conch. Cab., t. 19, f. 7, 9. = P. radula, Hinds, ... 242
Raffrayi (Pleurotoma), Tap.-Can. Bull. Soc Zool. Fr., iii, p. 246, pl. vi, f. 1, 1878, ... 163
Ramsayi (Clathurella), Brazier. Proc. Linn. Soc. N. S. Wales, i, 157, ... 299
Raphitoma, Bellardi. Monog. Pleur. Foss., 1847. = Daphnella, Sect. 160
Rapulum (Pusionella), Reeve. Conch. Icon., f. 83, 1846, . 235
Raricostata (Drillia), Smith. Proc. Zool. Soc., 1879, p. 192, t. 19, f. 18, ... 202
Rava (Clathurella), Hinds. Moll. Voy. Sulph., p. 17, pl. 5, f. 18, ... 296

Digitized by Google

PAGE.
Reciproca (Pleurotoma), Gould. Proc. Bost. Soc., vii, p. 336, 1860, ... 171
Reclusianus (Fusus), Petit. Jour. de Conch., ii, 77, t. 1, f. 1, 1851. = Pusionella vulpina, Born. 235
Recondita (Bela), Tiberi. = Pleurotoma torquata, Phil. . 275
Recondita (Lachesis), Brug. Misc. Malac., 1873, p. 10, f. 15. = L vulpecula, Monts. 225
Recurvirostris (Pusionella), Marrat. Quart. Jour. of Conch., i, 180, ... 236
Reeveana (Daphnella), Tryon, ... 305
Reeveana (Pleurotoma), Desh. Moll. Bourbon., 106, pl. xii, f. 5–7, 1863, ... 291
Reevei (Mangilia), Tryon, ... 265
Reevei (Pleurotoma), C. B. Adams. Contr., p. 54 (not Bellardi). = P. violacea, Hinds.
Reflexa (Clathurella), Reeve. Proc. Zool. Soc., 1845, p. 114, 288
Regia (Drillia), Beck. Reeve, Conch. Icon., sp. 75, 1843, . 201
Regularis (Drillia), Reeve. Proc. Zool. Soc., 1846, p. 4, . 189
Renieri (Pleurotoma), Phil. En. Moll. Sic., ii, t. 26, f. 22, 1844. = P. emendata, Monterosato.
Renieri (Pleurotoma), Scacchi. Petit, Cat. Shells Eur., 154. = D. Loprestiana, Calcara.
Reticosa (Clathurella), Ad. and Angas. Proc. Zool. Soc., 1863, p. 420, ... 281
Reticulata (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 61, 262
Reticulata (Bela), Vahl. Reeve, Conch. Icon., sp. 278. = B. decussata, Couth. 217
Reticulata (Mangilia), Renieri. Tav. alf. Conch. Adriat., p. 2. = C. Cordieri, Payr. 276
Reticulata (Pleurotoma), Brown. Brit. Shells, 1827. = Bela Trevelyana, Turton, ... 221
Reticulata (Pleurotoma). Garr. Proc. Cal. Ac., vol. i, p. 102, 1857. = P. pumila, Migh. 298
Reticulosa (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 297, ... 299
Retusa (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 44; Moll. Voy. Sulph., p. 24. pl. 7, f. 16, ... 290
Retusispirata (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 490, 1877, ... 170
Rhysa (Pleurotoma), Watson. Jour. Linn. Soc., xv, 400, 1881, ... 242
Richardi (Cithara), Crosse. Jour. Conch., xvii, p. 177, 1869); p. 65, pl. ii, fig. 3, 1872. = M. reticulata, Reeve. 262
Rigida (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 63. = M. Vauquelini, Payr. 243

Digitized by Google

PAGE.
Rigida (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 45; Moll. Voy. Sulph., p. 24, pl. 7, f. 18, ... 269
Rissoides (Clathurella), Reeve. Proc. Zool. Soc., 1843, p. 184, ... 281
Robillardi (Clathurella), Barcl. H. Ad., P. Z. S. 1869, p. 272, pl. 19, f. 2, ... 284
Robusta (Bela), Packard. Mem. Bost. Soc., i, p. 232, pl. vii, f. 12, ... 222
Robusta (Drillia), Hinds. Moll. Voy. Sulph., p. 17, pl. 5, f. 12, ... 180
Robusta (Pleurotoma), S. V. Wood. = P. turricula, Mont. 219
Robusticostata (Mangilia), Smith. Proc. Zool. Soc., 1879, p. 198, t. 19, f. 28, ... 255
Rombergi (Pleurotoma), Morch. Jl. de Conch., vi, 28, t. 10, f. 6, 1857. = P. picta, Beck, ... 164
Rosacea (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 109, . 179
Rosaria (Clionella), Reeve. Proc. Zool. Soc., 1846, p. 3, . 233
Rosea (Bela), Sars. Moll. Norv., 234, t. 23, f. 10, 1878. = B. turricula, Mont. 219
Rosea (Pleurotoma), Brusina. Verhand. zoo.-bot. Ges., Wien, 1865. = M. linearis, Mont.
Rosea (Pleurotoma), Quoy. Voy de l'Astr., p. 524, pl. 35, f. 10, 11. = D. Novæ-Zelandiæ, Reeve.
Rosea (Clathurella), Dunker. = C. Blanfordi, Nevill, . 291
Rosea (Drillia), Sowb. Proc. Zool. Soc., 1833, p. 134, . 190
Roseotincta (Pleurotoma), Montrouzier. Jour. de Conch., 1872, p. 361; 1873, pl. iv, f. 1, ... 272
Rosolina (Drillia), Marrat. Jour. Conch., i, 239, . . 190
Rossmassleri (Fusus), Anton. Verzeichn., 126. ? = Pleur. Vauquelini, Pay. 243
Rotundata (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 393, 1881, ... 242
Rotundicostata (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 493, ... 211
Rouaultia, Bellardi. Moll. Terz. Piemonte, pt. 2, 223, 1877. = Genotia, Sect. 154
Rougeyroni (Pleurotoma), Souv. Jour. Conch., 1874, p. 187, pl. vii, f. 1. = D. Barcliensis, H. Adams.
Rubescens (Bela), Jeffreys. Proc. Roy. Soc., xxv, p. 183, 223
Rubida (Mangilia), Hinds. Proc. Zool. Soc., 1834, p. 40; Moll. Voy. Sulph., 18, pl. 6, f. 6, ... 271
Rubicunda (Clathurella), Gould. Proc. Bost. Soc., vii, p. 338, ... 299
Rubiginosa (Drillia), Hinds. Moll. Voy. Sulph., p. 22, pl. 7, f. 5; Proc. Zool. Soc., 1843, p. 43, ... 199

Digitized by Google

PAGE.
Rubinicolor (Clionella), Reeve. Proc. Zool. Soc., 1845, p. 111, ... 234
Rubricata (Clathurella), Reeve. Conch. Ic., pl. 39, f. 321, 1846, 279
Rubrifasciata (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 110, ... 229
Rubro-apicata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 269, ... 319
Rubrocincta (Pleurotoma), Smith. Ann. Mag. Nat. Hist., 1882, 305, ... 274
Rubro-guttata (Clathurella), H. Adams. Proc. Zool. Soc., 1872, p. 14, pl. iii, f. 25. = C. tincta, Reeve, . . . 292
Rude (Pleurotoma), Philippi. Moll. Sicil., i, 199, t. 11, f. 16. = C. clathrata, Marcel de Serres, ... 276
Rude (Pleurotoma), Scacchi. Cat. Conch., 12, f. 17. = C. Cordieri, Payr. 276
Rudis (Drillia), Sowb. Proc. Zool. Soc., 1833, p. 134, . 191
Rufa (Bela), Mont. Test. Brit., 263, ... 224
Rufescens (Drillia), Dunker. Mal. Blatt., xviii, p. 159, . 212
Rufinodis (Pleurotoma), Martens. Mauritius, p. 227, pl. 20, f. 2. = G. granicostata, Reeve, ... 287
Rufocincta (Mangilia), Smith. Ann. Mag. N. H., 1882, 215, 249
Rufozonata (Clathurella), Angas. Proc. Zool. Soc., 1877, p. 38, pl. v, f. 13, ... 285
Rufus (Fusus), Gould (non Montag.). Inv. Mass., ed. i, p. 290, f. 192. = B. pyramidalis, Ström. 216
Rugifera (Pleurotoma), Sowb. Proc. Zool. Soc., 1833. = D. nigerrima, Sowb.
Rugosa (Pleurotoma), Migh. Proc. Bost. Soc., p. 23, 1845, vol. ii, ... 297
Rugulata (Bela), Moller, MSS. Sars, Moll. Norv., 230, t. 23, f. 6. = B. turricula, Mont. 219
Rugulata (Bela), Reeve. Conch. Icon., sp. 345, 1846. = Pleurotoma bicarinata, Couth. 215
Rugulata (Bela), Verrill. Proc. U. S. Nat. Mus., iii, p. 366. = B. Gouldii, Verrill.
Rugulosa, var. (Pleurotoma), Monterosato. Notizie, p. 52. = M. Paciniana, Calcara.
Rugulosa (Mangilia), Philippi. Enum. Moll., 2, pl. 26, f. 8, 245
Rustica (Pleurotoma), Anton. Verzeichniss, p. 74, . . 318
Rustica (Pleurotoma), P. P. Carp. Cat. Prov. (non Sowb.). = D. aterrima, Sowb.
Rustica (Pleurotoma), Sowb. Proc. Zool. Soc., 138, 1833. = D. nigerrima, Sowb.

Sacerdos (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 110. = Clavatula muricata, Lam. 229

Digitized by Google

PAGE.
Sacra (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 111, . 201
Sancti Joannis (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 1875, xv, p. 416.
Sandriana (Pleurotoma), Brusina. Contr., p. 65.
= P. Paciniana, Calcara.
Sandrii (Rhaphitoma), Brusina. Verh. zool.-bot. Ges., 1865.
= M. Paciniana, Calcara, ... 243
Sandwicensis (Daphnella), Pease. Proc. Zool. Soc., 1860, p. 148, ... 307
Sarsii (Bela), Verrill. Proc. U. S. Nat. Mus., iii, p. 364, 1880. Trans. Conn. Acad., v, 484, ... 218
Saturata (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 113, ... 303
Saulcydiana (Drillia), Recluz. Jour. de Conch., ii, 209, t. 5, f. 6, 1851. = D. umbilicata, Gray, ... 179
Scabra (Pleurotoma), Jeffreys. Brit. Conch., iv, 372, . 276
= Pleurotoma Cordieri, Payr.
Scabra (Pleurotoma), Sowerby. Ill. Index Brit. Shells, t. 19, 19, f. 13. = M. linearis, Mont.
Scacchii (Rhaphitoma), Bellardi. = Pl. linearis, Mont.
Scalarina (Clathurella), Desh. Conch. Isle Reunion, 1863, p. 109, ... 296
Scalarinus (Fusus), Lam. An. sans Vert., vii, 133.
= Pusionella nifat, Brug.
Scalaris (Bella), Pack. Can. Nat. and Geol., 1863.
= B. Americana, Packard.
Scalaris (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 39. Moll. Voy. Sulph., p. 18, pl. 6, f. 2, ... 287
Scalaris (Bela), Möll. Moll. Grœn., p. 12, 1842.
= B. turricula, Mont. 219
Scalaris (Pleurotoma), Vahl. Reeve, Conch. Icon., f. 277.
= B. decussata. Couth. 217
Scalaroides (Bela), Sars. Moll. Norv., 231, t. 23, f. 7, 1878.
= B. turricula, Mont. 219
Scalata (Pleurotoma), Souverbie. Jour. de Conch., xxii, p. 192, pl. 7, fig. 4. = M. angicostata, Reeve, . . . 252
Scalpta (Pleurotoma), Reeve. Proc. Zool. Soc., 1846, p. 5.
= C. monilifera, Sowb. 278
Scarabæus (Drillia), Reeve. Proc. Zool. Soc., 1846, p. 6, . 195
Schantarica (Bela), Middendorff. Reise, 223, t. 12, f. 17, 19, 1851, ... 214
Schilingi (Drillia), Weink. Conch. Cab., t. 16, f. 7, 9, . 193
Scobinella, Conrad. Jour. Acad. N. S. Phila., i, 111, 1848.
= Cordiera, Rouault, ... 227
Sculpta (Clathurella), Hinds. Proc. Zool. Soc., 1843, p. 39. Voy. Sulphur, 17, t. 5, f. 17, ... 280

Digitized by Google

PAGE.
Sculptilior (Clathurella), T.-Woods. Proc. Roy. Soc. Tasm., 1875, p. 38, ... 282
Sculptilis (Clathurella), Angas. Proc. Zool. Soc., 1871, p. 17, pl. 1, fig. 19, ... 282
Secalina (Pleurotoma), Philippi. Enum. Moll. Sic., 2, pl. 26, f. 9. = var. of B. septangularis, Mont. 223
Secta (Defrancia), G. B. Sowerby. Proc. Zool. Soc , 1870, p. 254, ... 299
Semen (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 5, 254
Semiassa (Mangilia), Gould. Proc. Bost. Soc. N. H., vii, p. 382, ... 261
Semicolon (Pleurotoma), S.Wood. Crag. Moll., 54, t. 5, f. 3, 309
Semicostata (Clionella), Kiener. Iconog., p. 39, pl. 19, f. 1, 233
Semicostata (Pleurotoma), pars, Krauss. Sudafr. Moll., p. 109. = P. sigillata, Reeve.
Semicostatus (Fusus), Cantraine. Jeffreys, Zool. Proc., 392, 1883. = D. Maravignæ, Bivona.
Semigranosa (Clathurella), Reeve. Proc. Zool. Soc., 1846, p. 5, ... 290
Semilineata (Clathurella), Garrett. Proc. A. N. S. Phila., 1873, p. 221, pl. 2. f. 37. = M. granosa, Dunker. . . 295
Seminella, Pease. See Manual, v, 102, ... 160
Seminifera (Drillia), Gould. Proc. Bost. Soc. Nat. Hist., iii, p. 140. = D. interrupta, Lam.
Seminuda (Pleurotoma), Anton. Verzeichniss, 73, . . 318
Semiplicata (Bela), Sars. Moll. Norv., t. 16, f. 4. = B. pyramidalis, Ström. 216
Semiplicatum (Pleurotoma), Bonelli. Phil. Moll. Sicil., ii, 174, t. 26, f. 18. = C. stria, Calc. 274
Semisculpta (Zafra), G. and H. Nevill. Jour. As. Soc. Beng., 1875, ii, p. 97, pl. vii, f. 6, 7, ... 314
Senegalensis (Daphnella), von Maltzan. Jahr. Mal. Gesell., 1883, p. 134, t. 3, f. 15, ... 310
Serga (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 65, 1881, 213
Serrata (Defrancia), Cpt. Proc. Zool. Soc., 1856, p. 163, . 299
Septangularis (Bela), Mont. Test. Brit., p. 268, pl. 9, f. 5, . 223
Sexcostata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 305, ... 319
Sicula (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 59, . 244
Sigillata (Clionella), Reeve. Conch. Ic., pl. 40, f. 363, 1846, 233
Sigsbei (Pleurotoma), Dall. Bull. Mus. Comp. Zool., ix, 57, 1881, ... 316
Silicea (Borsonia), Watson. Jour. Linn. Soc , xv, 474, 1881, 228
Similis (Pleurotoma), Bivona. Monterosato, Nuova Revista, 42. = P. undatiruga, Bivona, var. 238

Digitized by Google

PAGE
Simplex (Bela), Verrill. Proc. U. S. Nat. Mus., iii, p. 367, 1880; Trans. Conn. Acad., v, 493.
= B. Schantarica, Middendorff.
Simplex (Pleurotoma), Middendorff. Reise, 223, t. 12, f. 15, 16, 1851. = Bela Schantarica, Midd.
Sinclairi (Clathurella), Smith, MSS. Gillies, Trans. N. Zeal. Inst., xiv, 170, ... 283
Sinensis (Drillia), Hinds. Proc. Zool. Soc., 1843, p. 38, . 201
Singularis (Clathurella), G. and H. Nevill. J. A. S. Beng., 1875, pt. ii, p. 89, pl. vii, f. 10, ... 293
Sinistralis (Surcula), Petit. Guerin's Mag. de Zool., 1839, pl. i, ... 240
Sinuata (Cithara), Cpt. Proc. Zool. Soc., 1856, p. 162, . 271
Sinuata (Clavatula), Born. Test. Mus. Cæs., p. 268, . . 233
Sinuosa (Drillia), Gray. Reeve, Icon., sp. 307, 1846, . . 180
Sinuosa (Pleurotoma), Migh. Proc. Bost. Soc. N. H., vol. ii, p. 23, ... 319
Sinuosum (Pleurotoma), Fleming. = P. Leufroyi, Mich.
Sinuosus (Pleurotoma) Conch, = P. gracilis, Mont. . . 312
Smirna (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 66, 1881, 213
Smithii, var. of Trevelyana (Bela), Jeff. Ann. Mag. N. H., 1876, p. 332; Trans Conn. Acad., v, 461.
? = B. incisula, Verrill, ... 217, 221
Smithi (Clathurella), G. and H. Nevill. J. A. S. Beng., 1875, pt. ii, p. 88, pl. 8, f. 13, ... 292
Smithii (Pleurotoma), Forbes. Ann. Mag., 107, t. 2, f. 14, 1840. = D. costulata, Blainv. 309
Solida (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 64, . 274
Solida (Pleurotoma), C. B. Adams. Contr. Conch., p. 61.
= Drillia fuscescens, Gray.
Solidula (Clathurella), Dkr. Mal. Blätt., xviii, p. 163.
= C. rugosa, Mighels, ... 297
Solomonensis (Drillia), E. A. Smith. Jour. Linn. Soc., xii, p. 537, pl. xxx, f. 6, ... 205
Sordida (Mangilia), Reeve. Proc. Zool. Soc., 1845, p. 117, 254
Soror (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 303, . 274
Souverbiei (Mangilia), Tryon, ... 264
Souverbiei (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 300, ... 307
Sowerbyi (Drillia), Reeve. Corrections in Conch. Icon., . 180
Spaldingi (Drillia), Brazier. Proc. Linn. Soc. N. S. W., i, p. 153, ... 212
Speciosa (Pleurotoma), Reeve. Conch. Ic., pl. 2, fig. 9, 1843, 173
Spectabilis (Pleurotoma), Reeve. Conch. Ic., i, fig. 6, 1843.
= P. babylonia, Linn. 162

Digitized by Google

PAGE.
Spectrum (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 113. 200
Spicata (Pleurotoma), Hinds. Moll. Voy. Sulph., p. 17, pl. 5, f. 13. = D. Sinensis, Hinds.
Spicea (Pleurotoma), Watson. Jour. Linn. Soc., xv, 419, 1881, ... 212
Spinicincta (Columbarium), Martens. Mittheil., ii, p. 105, t. 21, f. 1–3. = C. Pagoda, Lesson, var. 176
Spinosa (Pl. reticulata, var. ·, Forbes and Hanley. Brit. Sh., t. 113, f. 5. = M. Cordieri, Payr.
Spinosa (Pleurotoma), Smith. Ann. Mag. N. H., 1882, p. 206, ... 191
Spiralis (Pleurotoma), E. A. Smith. Proc. Zool. Soc., 1871, p. 731, pl. 75, f. 8, ... 171
Spirata (Pleurotoma), Lam. An. s. Vert., vii, p. 93, . . 232
Spirotropis, Sars. Moll. Norv., 242, 1878, . . . 155, 213
Splendida (Mangilia), A. Adams. Proc. Zool. Soc., 1867, p. 309, pl. 19, f. 24, ... 255
Splendidula (Drillia), Sowb. Proc. Zool. Soc., 1833, p. 135, 200
Spurca (Mangilia), Hinds. Moll. Voy. Sulph., p. 17, pl. 5, f. 14, ... 273
Staminea (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 388, 1881, ... 242
Stellata (Pleurotoma), Morch. Mal. Blatt., vii, p. 103, . 251
Stellata (Mangilia), Stearns. Proc. Bost. Soc., 1872, xv, p. 22, ... 246
Stercus pulicum (Priamus), Chemn. 9, pl. 120, fig. 1026–7. = Halia Priamus, Meuschen.
Sterrha (Drillia), Watson. Jour. Linn. Soc., xv, 426, 1881, 182
Steveni (Buccinum), Andrj. Krynicki. Bull. Nat. Mos., 1837, ii, p. 59. = D. costulata, Blainv. 309
St. Gallæ (Mangilia). T.-Woods. Proc. Roy. Soc. Tas., 1876, 137, ... 312
Stirophora (Drillia), Watson. Jour. Linn, Soc., xv, 422, 1881, ... 212
Stolida (Drillia), Hinds. Proc. Zobl. Soc., 1843, p. 37, . 178
Stossiciana (Mangilia), Brusina. J. de Conch., xviii, p. 235. = M. rugulosa, Phil. 245
Streptophora (Pleurotoma), Watson. Jour. Linn. Soc., xv, 464, 1881, ... 299
Stria (Clathurella), Calcara. Ric. Mal., 1839, p. 11, fi 5, . 274
Striata (Clionella , Kiener. Icon., p. 36, pl. 14, f. 2, . . 233
Striata (Conopleura), Hinds. Moll. Voy. Sulph., pl. 7, f. 22, 23, ... 211
Striata (Cythara), Schum. Syst. Vers. Test., p. 245. = Mangilia citharella, Lam. 257

Digitized by Google

PAGE.
Strigata (Cythara), Pease. Proc. Zool. Soc., 1862, p. 242, . 271
Strigata (Drillia), Sowb. Proc. Zool. Soc., 1873, t. 59, f. 9.
= D. Barkliensis, H. Adams.
Striolata (Pleurotoma), Scacchi. Cat. Conch. Neapol., 1836.
= P. costulata, Blainv. 309
Striosa (Mangilia), C. B. Adams. Panama Shells, 147, 1852, 249
Stromboides (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 63, 264
Stromboides (Cythara), Val. Carpenter.
= Pleurotoma triticea, Reeve.
Stromboides (Drillia), Sowb. Gen. Shells, Pleur., f. 4, . 176
Strucki (Mangilia), von Maltzan. Jahrb. Mal. Gesell., 1883,
133, t. 3, f. 14, ... 245
Studeriana (Drillia), Martens. Sitzb. Berl., 22, 1878; Mitth.,
i, p. 37, pl. 8, f. 2, ... 209
Subauriformis (Drillia), Smith. Zool. Proc., 195, t. 19, f. 23,
1879, ... 207
Subcaudata (Mangilia), Bivona. = M. multilineolata, Desh.
Subclathrata (Mangilia), von Maltzan. Jahr. Mal. Gesell.,
1883, 133, t. 3, f. 13, ... 245
Subdiaphana (Mangilia), Cpt. Ann. Mag. N. H., 1864, xiv,
p. 45, ... 271
Subgranosa (Pleurotoma), Smith. Ann. Mag. N. H., 1882,
300, ... 299
Subgranulatus (Fusus), Petit. Jour. de Conch., ii, 78, t. 2,
f. 1, 1851. = Pusionella Milleti, Petit, ... 235
Subluta (Bela), Gould. Bost. Proc., iii, 142, 1849, . . 222
Subnigrus (Fusus), Brown. Ill. Conch., t. 5, f. 58, 59.
= Lachesis minima, Mont. 225
Subobliquata (Drillia), Smith. Proc. Zool. Soc., 1879, p.
191, t. 19, f. 16, ... 203
Subochracea (Drillia), E. A. Smith. Ann. and Mag. N. H.,
1877, p. 493, ... 211
Subsida (Drillia), Dall. Bull. Mus. Comp. Zool., ix, p. 62,
1881, ... 212
Subtilis (Mangilia), Watson. Jour. Linn. Soc., xv, 431,
1881, ... 271
Subula (Mangilia), Reeve. Proc. Zool. Soc., 1845, p. 113, 270
Subulata (Pleurotoma), Anton. Verzeichniss, p. 73, . . 318
Subulata (Pleurotoma), Mke. Syn. Meth., No. 1131, 1830, 319
Subventricosa (Pleurotoma), E. A. Smith. Ann. Mag. N.
H., 1877, p. 500, ... 234
Subvitrea (Daphnella), Smith. Proc. Zool. Soc., 1879, p.
209, pl. 20, f. 43, ... 314
Subzonata (Daphnella), Smith. Proc. Zool. Soc., 1879, p.
197, t. 19, f. 27, ... 284
Sulcata (Lachesis), Hutton. Cat. Mar. Moll. N. Zeal., p. 12, 226

Digitized by Google

PAGE.
Sulcata (Mangilia), Carpenter. Proc. Zool. Soc., 1865, p. 272, ... 250
Sumatrensis (Pleurotoma), Petit. Jour. de Conch., p. 55, t. 2, f. 2, 1852. = Drillia crenularis, Lam. 178
Supercostata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 301, ... 307
Surcula, H. and A. Adams. Genera, i, 88, 1853, . 158, 236
Surculites, Conrad. Am. Jour. Conch., 1, 213, 1865. = Surcula, Sect. 158
Suturalis (Defrancia), Moller. Reeve, Conch. Icon., f. 343. = Pleurotoma Grœnlandica, Reeve.
Suturalis (Drillia), Gray. Ann. Mag. N. H., 1838, p. 29, . 212
Suturalis (Pleurotoma), Bronn. Erg. mei. nat. Reise, ii. = P. gracilis, Mont. 312
Symmetrica (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 5, ... 247
Syngenes (Pleurotoma), Watson. Jour. Linn. Soc., xv, 396, 242
Syracusanum (Pleurotoma), Marav. = M. Cordieri, Payr.

Tabulata (Daphnella), Cpt. Ann. Mag. N. H., 1865, xv, p. 29, ... 312
Tæniata (Drillia), T.-Woods. Proc. Roy. Soc. Tasm., 1878, 36, ... 212
Tæniata (Mangilia), Desh. Exp. Morée, p. 178, xix, f. 37–39, 243
Taranis, Jeffreys. Ann. Mag. N. H., 4th ser., v, 447, 1870. = Daphnella, Sect. 160, 315
Tarentini (Pleurotoma), Phil. (1844). = D. Loprestiana, Calcara.
Tasmanica (Cithara), T.-Woods. Proc. Roy. Soc. Tasm., 1875, p. 145, ... 271
Tasmanica (Daphnella), T.-Woods. Proc. Roy. Soc. Tasm., 1876, 138, ... 306
Taxus (Pleurotoma), Chemn. Conch., x, pl. 162, fs. 1550 and 1551, ... 231
Tayloriana (Pleurotoma), Reeve. Conch. Icon., pl. 40, f. 366. = D. crenularis, Lam. 178
Tenebrosa (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 62, 260
Tenella (Defrancia), Jeffr. Ann. Mag. N. H., 1882, p. 33, . 299
Tenella (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 302, 307
Tenera (Defrancia), Jeffreys. Brit. Assoc. Rept., 114, 1873, 299
Tenuiclathrata (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 301, ... 307
Tenuicostata (Pleurotoma), Sars. Vid. Selsk. Forhand, 1868, p. 259. = var. Bela decussata, Couth. . . . 217
Tenuilirata (Bela), Dall. Am. Jour. Conch., vii, p. 98, 1871. = B. Schantarica, Middendorff.

Digitized by Google

PAGE.
Tenuilirata (Clathurella), Angas. Proc. Zool. Soc., 1871, p. 17, pl. 1, f. 18, ... 281
Tenuis (Pleurotoma), Anton. Verzeichniss, p. 73, . . 318
Tenuis (Pleurotoma), Gray. An. Mag. N. H.
= P. undatiruga, Bivona, ... 238
Teres, Bucq., Dautz. and Dollf. Moll. Roussillon, 85, 1883.
= Daphnella, Sect. 160, 313
Teres (Pleurotoma), Forbes. Proc. Zool. Soc., 1844.
= P. anceps, Eich. 313
Tessellata (Daphnella), Garrett. Proc. A. N. S., 1873, p. 230, pl. 3, f. 61, ... 303
Tessellata (Pleurotoma), Hinds. Proc. Zool. Soc., 1843, p. 44; Moll. Voy. Sulph., p. 23, pl. 7, f. 17.
Tessellata (Pleurotoma), Reeve. Proc. Zool. Soc., 1846, p. 4.
= C. formosa, Reeve, ... 297
Tetragona (Mangilia), Gould. Proc. Bost. Soc., 1881, p. 382, 261
Texta (Drillia), Dkr. Mal. Blatt., vi, p. 225, ... 207
Textilis (Clavatula), Hinds. Proc. Zool. Soc., 1843, p. 43, 231
Thea (Drillia), Dall. Proc. Nat. Mus., vi, 328, t. 10, f. 5, 1883, ... 189
Thesbia, Jeffreys. Sars, Moll. Norv., 221, 1878.
= Daphnella, Sect. 160, 315
Tholoides (Drillia), Watson. Jour. Linn. Soc., xvi, p. 248, 1882, ... 212
Tiara (Mangilia), Watson. Jour. Linn. Soc., xv, 440, 1881, 249
Tiarella (Pleurotoma), Valen. Kiener, Iconog., 56, t. 23, f. 2.
= D. rustica, Sowb.
Tiarula (Pleurotoma), Lovén. = P. brachystoma, Phil. . 308
Ticaonica (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 116, ... 304
Tigrina (Pleurotoma), Lam. Anim. s. Vert., vii, p. 95, . 164
Tincta (Clathurella), Reeve. Proc. Zool. Soc., 1846, p. 5, . 292
Tmeta (Drillia), Watson. Jour. Linn. Soc., xv, 424, 1881, . 212
Todilla (Pleurotoma), Migh. Proc. Bost. Soc. N. H., ii, p. 24, ... 319
Tomella, Swainson, Malac., 115, 314, 1840.
= Perrona, Schum. 157, 231
Tornata (Surcula), Dillwyn. Cat., ii, p. 715, 1815, . . 237
Tornatus var. γ (Murex), Dillw. Cat., ii, p. 715.
= Pleurotoma Virgo, Lam.
Torosa (Drillia), Carpenter. Jour. de Conch., 3d ser., v, 145, 1865, ... 183
Torquata (Clathurella), Phil. Moll. Sic., ii, p. 171, t. xxvi, f. 14, 1844, ... 275
Trachys (Mangilia), T.-Woods. Trans. Roy. Soc. Vict., xiv, p. 57, ... 261

Digitized by Google

PAGE.
Trailli (Drillia), Hutton. Cat. Mar. Moll. N. Z., p. 11, 1873; Man. N. Z. Moll., 42, ... 206
Translucida (Pleurotoma), Watson. Jour. Linn. Soc., xv, 444, 1881, ... 315
Trecchi (Pleurotoma), Testa. Jeffreys, Brit. Conch., iv, 363. = Pl. anceps, Eichw.
Trecchi (Pleurotoma), Testa, 1842. Monterosato, Jour. de Conch., 1874, 279. = D. Loprestiana, Calcara.
Trevelliana (Bela), Turton. Mag. N. H., vii, p. 351, 1834; Jeffreys, Brit. Conch., iv, 398. = B. Trevelyana, Turton, 221
Tricarinata (Drillia), T.-Woods. Proc. Linn. Soc. N. S. W., ii, p. 265, ... 212
Tricarinata (Clathurella), Val. Reeve, Icon., f. 121, 1843, . 289
Tricinctum (Pleurotoma), Brugn. (1862). Monterosato, Journ. de Conch., 279, 1874. = D. Loprestiana, Calcara.
Tricolor (Clathurella), Brazier. Proc. Linn. Soc. N. S. Wales, i, p. 158, ... 299
Tricolor (Pleurotoma), Risso. Eur. Merid., iv, 215. = P. linearis, Montagu.
Trifasciata (Pleurotoma), Gray. Reeve, Icon., f. 297, Dec. 1845. = Mangilia trilineata, Ad. 248
Trifilosa (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 297, 299
Trilineata (Mangilia), C. B. Adams. Proc. Bost. Soc. N. H., ii, p. 3, Jan. 1845; Contrib. Conch., 55, ... 247
Trilix (Pleurotoma), Watson. Jour. Linn. Soc., xv, p. 390, 1881, ... 242
Tripartita (Clavatula), E. A. Smith. Weinkauff in Küster, 120, t. 26, f. 12, 13. ? = C. obesa, Reeve, . . . 232
Triporcata (Pleurotoma), Smith. Proc. Zool. Soc., 1879, p. 188, t. 19, f. 9, ... 172
Tripter (Drillia), von Maltzan. Jahrb. Mal. Gesell., 1883, 119, t. 3, f. 1, ... 208
Triticea (Mangilia), Kien. Ic., pl. 27, f. 3, . . . 268, 271
Tritonoides (Clathurella), Reeve. Proc. Zool. Soc., 1843, p. 182, ... 283
Tritonum (Perronea), Schumacher. Nouv. Syst., p. 218. = Pleurotoma perron, Chemn.
Trivaricosa (Daphnella), Martens. Mauritius, 228, t. 20, f. 1, 305
Trivittata (Mangilia), Ad. and Reeve. Voy. Samarang, p. 40, pl. x, f. 9. = M. pellucida, Reeve, ... 266
Trizonata (Mangilia), Smith. Ann. Mag. N. H., 1882, 215, 261
Tuberculata (Surcula), Gray. Zool. Beech. Voy., p. 120, . 237
Tuberculifera (Surcula), Brod. and Sowb. Zool. Jour., iv, p. 378, 1829, ... 238
Tuberosa (Drillia), Smith. Ann. Mag. N. H., 1875, xv, p. 418, 212

Digitized by Google

PAGE.
Tumida (Clathurella), Pease. Am. Jour. Conch., iii, p. 218, pl. 15, fig. 14, 1867. = C. Reeveana, Desh. . . . 291
Tumida (Clavatula), Sowb. Proc. Zool. Soc., 1870, p. 253, 232
Turbinatus (Boletus), Martini. = Pleurotoma sinuata, Born.
Turbinelloides (Clathurella), Reeve. Conch. Ic., pl. 39, f. 295, 1846, ... 280
Turgida (Bela), Gould. Proc. Bost. Soc., 1861, 7, p. 337, . 222
Turgida (Pleurotoma), Forbes. Reeve, Conch. Icon., f. 163, 1844, ... 308
Turqueti (Lachesis), Ch. Velain. Arch. Zool. Exp., vi, p. 107, pl. ii, f. 18, 19, 1877, ... 226
Turricula, Schumacher. Essai Nov. Gen., 217, 1817. = Surcula, Ads.
Turricula (Bela), Mont. Test. Brit., i, p. 262, 1803, . . 219
Turricula (Clathurella), Dkr. Mal. Blätt., xviii, p. 161, . 299
Turricula (Cythara), Reeve. Proc. Zool. Soc., 1846, p. 62, 268
Turricula (Fusus), Gould. Rep. Inv. Mass., 1st ed., p. 292, pl. 13, f. 193. = Bela americana, Packard.
Turricula (Pleurotoma), Sowb. Proc. Zool. Soc., 1833, p. 137. = D. Sowerbyi, Reeve.
Turris, Humphrey, Mus., 1797. Ad. Genera, i, 87, 1853. = Pleurotoma, Lamarck.
Turris (Drillia), Reeve. Conch. Ic., pl. 37, f. 344; Corrections, Index of Conch. Icon. 210
Turris (Pleurotoma), Val. Atlas, Voy. Venus, t. 5, f. 3. = P. australis, Roissy, ... 236
Turritellatus (Fusus), Desh. Exp. Morée, pl. xix, f. 28, 45. = Lachesis minima, Mont. 225
Turritispira (Pleurotoma), Smith. Ann. Mag. N. H., 1882, 306, ... 316
Typhlomangilia, M. Sars, *em.* Sars, Moll. Norv., 1878. = Bela, Sect. 156, 223

Ula (Drillia), Watson. Jour. Linn. Soc., xv, 420, 1881, . 212
Ulideana (Pleurotoma), Thomps. Ann. Mag. N. H., xv, 316, t. 19, f. 2. = B. rufa, Mont., var. 224
Umbilicata (Drillia), Gray, MSS. Ann. Mag. N. H., i, 1838, p. 28, ... 179
Undata (Bela), Verkr. Jahr. Mal. Gesell., v. p. 229, 1878, . 223
Undatella (Bela), Gould. Proc. Bost. Soc. N. H., 1861, viii, p. 280, ... 222
Undaticostata (Mangilia), Reeve. Proc. Zool. Soc., 1845, p. 117, ... 251
Undatiruga (Surcula), Bivona. Gen. posthum., 7, . . 238
Undosa (Pleurotoma), Lam. An. s. Vert., vii, p. 95, . . 166

Digitized by Google

PAGE.

Undulata (Mangilia), Risso. Hist. Nat. Eur. Merid.
? = M. Sicula, Reeve.
Unedo (Pleurotoma), Valenc., MSS. Paris Mus., Kiener, Coq. viv., 19, t. 14, f. 1, ... 165
Unicolor (Pleurotoma), Sowb. Proc. Zool. Soc., 1843.
= D. nigerrima, Sowb.
Unifasciata (Mangilia), Desh. Expl. Sci. Morée, t. 19, f. 22–24, ... 243
Unifasciata (Pleurotoma), O. G. Costa (non Desh.).
= P. Vauquelini, Payr. 243
Unilineata (Cythara), E. A. Smith. Jour. Linn. Soc., xii, p. 538, pl. xxx, f. 13, 1876, ... 272
Unimaculata (Drillia), Sowb. Proc. Zool. Soc., 1833, p. 134, 180
Unizonalis (Drillia), Lam. An. sans Vert., vii, p. 92, . 185
Urnula (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 114, 306
Ustulata (Pleurotoma), Reeve. Conch. Ic., pl. 40, f. 369, 1846, ... 167

Vahlii (Pleurotoma), Möller. Moll. Grœnl., p. 13.
= B. pyramidalis, Ström. 216
Valenciennesii (Pleurotoma), Maravig.
= D. attenuata, Mont. 309
Valida (Pusionella), Dunker. Zeit. Mal., 191, 1852; Novit. Conch., 33, t. 10, f. 1, 2, ... 234
Vallata (Pleurotoma), Gould. Proc. Bost. Soc. N. H., vii, p. 336, 1860, ... 171
Vancouverensis (Pleurotoma), Smith. Ann. Mag. N. H., vi, 1880, p. 286, ... 319
Varia (Cithara), Pease. Proc. Zool. Soc., 1860, p. 447.
= Columbella Peasei, Martens. Manual, vol. v, 166.
Variabilis (Drillia), Smith. Ann. and Mag. N. H., 1877, xix, p. 495, ... 180
Varicifera (Daphnella), Pease. Am. Jour. Conch., iii, p. 221, pl. xv, f. 21, ... 301
Variegata (Mangilia), Cpt. Ann. Mag. N. H., 1865, xv, p. 394, ... 300
Variegata (Pleurotoma), Kien. Coq. viv., pl. ix, f. 1, . 164
Variegata (Pleurotoma), Philippi. En. Moll. Sic., i, 197, t. 11, f. 14. = P. purpureum, Mont.
Variegata (Pleurotoma), Reeve. Conch. Icon., pl. i, fig. 2, 1843. = P. picturata, Weink.
Varicosa (Drillia), Reeve. Proc. Zool. Soc., 1843, p. 187, 205
Varicosa (Pleurotoma), Sowb. Jour. Conch., 1874, p. 190, pl. vii, fig. 3, ... 305
Variculosa (Mangilia), Sowb. Proc. Zool. Soc., 1833, . 257

Digitized by Google

PAGE.
Varix (Daphnella), T.-Woods. Proc. Roy. Soc. Tas., 1876, p. 138. ? = D. compta, Ad. and Ang. 306
Vauquelini (Pleurotoma), Payraudeau. Moll. Cors., p. 145, pl. vii, figs. 14, 15, [illegible] 243
Ventricosa (Bela), Mörch. Moll. Grœnl., No. 95. = B. bicarinata, Couth. 215
Venusta (Pleurotoma), Reeve. Proc. Zool. Soc., 1843, p. 181, 162
Verrillii (Drillia), Dall. Bull. Mus. Comp. Zool., ix, 68, 1881, 213
Verrillii (Pleurotoma), Dall. Bull. Mus. Comp. Zool., ix, 57, 1881, ... 316
Versicolor (Pleurotoma), Scacchi. Cat. Conch., 12, f. 19. = P. purpureum, Mont.
Versicolor (Pleurotoma), Weink. Küster, Conch. Cab., pl. xv, f. 8. = P. radula, Hinds, ... 241
Vertebralis (Pleurotoma), E. Smith. Weinkauff, Jahrb., iv, 5, 1877. = Pl. violacea, Hinds.
Vertebrata (Pleurotoma), E. A. Smith. Ann. Mag. N. H., 1875, xv, p. 416. = P. violacea, Hinds.
Vespuciana (Clathurella), d'Orb. Moll. Cuba, ii, 175, t. 24, f. 13–15, ... 279
Vestalis (Pleurotoma), Phil. Zeit. f. Mal., 1851, p. 93, . 319
Vexillum (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 59, 265
Vexillum (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 115, 209, 284
Vicina (Mangilia), C. B. Adams. Conch. Contr., p. 66, . 248
Vidua (Pleurotoma), Hinds (not Reeve). Weinkauff, Küster, Conch. Cab., 65, t. 13, f. 1, 3. = D. unizonalis, Lam.
Vidua (Pleurotoma), Reeve. Proc. Zool. Soc., 1845, p. 112. = D. unizonalis, Lamarck.
Vidualoides (Drillia), Garrett. Proc. A. N. S. Phila., 1873, p. 217, pl. 2, f. 28. = D. unizonalis, Lam.
Villiersii (Pleurotoma), Michaud. Bull. Soc. Linn. Bord., 262, t. 1, f. 4, 5, 1826. = P. attenuata, Mont. . . . 308
Vincentina (Daphnella), Crosse. Jour. de Conch., 1865, p. 422, t. 11, f. 6, ... 311
Vinosa (Surcula), Dall. Proc. Cal. Ac., v, p. 253, 1874, . 240
Violacea (Bela), Migh. Proc. Bost. Soc. N. H., 1841, vol. i, p. 50; Jour. Bost. Soc. N. H., 1842, p. 15, pl. 1, f. 21. = B. bicarinata, Couthuoy, ... 215
Violacea (Clathurella), Pease. Am. Jour. Conch., iii, p. 218, pl. 15, f. 15, 1867. = C. clandestina, Desh. . . . 298
Violacea (Pleurotoma), Hinds. Moll. Voy. Sulph., p. 16, pl. 5, f. 8, ... 169
Violaceus (Pleurotoma), Desh. = Pl. linearis, Mont.
Virgatum (Pleurotoma), Bivona. = Pl. inflata, Cr. et Jan.

Digitized by Google

PAGE.

Virginea (Pleurotoma), Beck, MSS. Reeve, Icon., f. 32.
= Clavatula muricata, Lam. 229
Virginea (Pleurotoma), Valenc. Kien. (non Beck), Iconog., p. 55, t. xxi, f. 2, ... 167
Virgo (Pleurotoma), Lam. Hist. Nat., vii, p. 94, . . 168
Viridula (Bela) Möller. Moll. Grœnl., p. 14.
= B. decussata, Couth. 217
Viridula (Pleurotoma), Reeve (not Möller). Conch. Icon., f. 306. = Columbella Holbolii, Beck, Manual, v, . . 223
Vitrea (Daphnella), Garrett. Proc. A. N. S. Phila., 1873, p. 230, pl. 3, f. 60, ... 303
Vitrea (Mangilia), Reeve. Proc. Zool. Soc., 1845, p. 118, . 254
Vittata (Mangilia), Hinds. Proc. Zool. Soc., 1843, p. 45; Moll. Voy. Sulph., p. 26, pl. ix, f. 3, ... 269
Vittata (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 60.
= M. obesa, Reeve, ... 262
Vittata (Mangilia) Reeve (not Hinds). Icon., f. 53.
= M. exquisita, Smith.
Vittata (Drillia), Reeve. Proc. Zool. Soc., 1845, p. 112, . 188
Volutella (Pleurotoma), Val. Kiener, Pleur., 67, t. 25, f. 1.
= C. inflata, Crist. et Jan. 274
Vulpecula (Lachesis), Monter. Not. Conch. Med., 1872, p. 49, ... 225
Vulpina (Pleurotoma), Bivona, Benoit.
? = D. attenuata, Montg. 309
Vulpina (Pusionella), Born. Test. Mus. Cæs., 317, t. 11, f. 10, 11, ... 234
Vultuosa (Pleurotoma), Reeve. Proc. Zool. Soc., 116, 1845, 296

Wallaysi (Fusus), Petit. Jour. de Conch., ii, 74, t. 1, f. 7, 1851, 2d ser., i, 35, 1856. = Pusionella rapulum, Reeve, 235
Weinkauffi (Pleurotoma), Jickeli, MS. Moll. Rothes Meer.
= P. violacea, Hinds.
Weldiana (Drillia), T.-Woods. Proc. Roy. Soc. Tas., 1875, p. 137, ... 212
Willei (Bela), Friele. Prel. Rep. Moll. Norw. Exp., p. 9, 1876; Jahr. Mal. Ges., iv, 263, ... 223
Wilmeri (Drillia), Smith. Proc. Zool. Soc., 1878, p. 805, pl. 50, f. 4, ... 205
Woodiana (Bela), Möll. Grœnl., p. 13.
= B. turricula, Mont. 219
Woodii (Pleurotoma), Kien. Ic. Coq. viv., p. 12, t. 7, f. 1.
= P. cryptorrhaphe, Sowb. 168

Yeddoensis (Pleurotoma), Jousseaume. Bull. Soc. Zool. France, 1883, 196; t. 10, f. 7, ... 319

Digitized by Google

PAGE.

Zafra, A. Ad. Ann. Mag. N. H., 1860, vi, p. 331.
= Daphnella, Sect. 160, 313
Zealandica (Drillia), E. A. Smith. Ann. Mag. N. H., 1877, p. 492; Gillies, Trans. N. Zeal. Inst., xiv, 170, . . . 211
Zebra (Drillia), Lam. Hist. Nat., Ed. Desh., x, p. 177, . 196
Zebroides (Pleurotoma), Weink. Conch. Cab., p. 108, pl. 23, f. 8. = D. zebra, Lam.
Zebuensis (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 65.
= M. derelicta, Reeve, ... 266
Zonale (Pleurotoma), Del. Chiaje. Mem., t. 84, f. 1.
= P. Leufroyi, Mich.
Zonata (Columbella), Gould. Otia, 130, Bost. Proc., vii, 1860; Smith, Zool. Proc., 209, 1879.
? = Zafra Mitræformis, A. Ad. 313
Zonata (Mangilia), Reeve. Proc. Zool. Soc., 1846, p. 61, . 252
Zonata (Pleurotoma), Gray, MSS. Reeve, Icon., sp. 74.
= D. flavidula, Lam.
Zonulata (Clathurella), Angas. Proc. Zool. Soc., 1867, p. 113, pl. xiii, f. 17, ... 285
Zonulata (Pleurotoma), Reeve. Conch. Syst., ii, pl. 234, f. 10. = D. aterrima, Sowb.

REFERENCE TO PLATES.

PLEUROTOMIDÆ.

Plate 1.

FIGURE. PAGE.

A. Pleurotoma babylonia, Linn. Quoy, Voy. Astrol., t. 35, f. 4, ... 162
B, C. Pleurotoma babylonia, operculum. Adams, Genera, t. 10, f. 1 *a*, *b*, ... 162
1. Pleurotoma babylonia. Reeve, Conch. Icon., f. 5, . 162
2. Pleurotoma spectabilis, Reeve (= babylonia). Reeve, Icon., f. 6 *a*, ... 162
3. Pleurotoma Raffrayi, Tapparone-Canefri. Bull. Soc. Zool. France, iii, t. 6, f. 1, ... 163
6. Pleurotoma crispa, Lam. (= grandis, Gray). Reeve, Icon., f. 11 *a*, ... 163
7. Pleurotoma grandis, Gray. Reeve, Conch. Icon., f. 13, 163
8. Pleurotoma Rombergi, Mörch (= picta, Beck). Jour. de Conch., 2d ser, ii, t. 10, f. 6, ... 163

Digitized by Google

Plate 2.

FIGURE. PAGE.
4. Pleurotoma venusta, Reeve (= babylonia). Icon., f. 79, 162
5. Pleurotoma Garnonsi, Reeve Icon., f. 4, . . . 163
9. Surcula turris, Val. (= Australis, Roissy). Voy. Venus, t. 5, f. 3, ... 236
10. Pleurotoma tigrina, Lam. Reeve, Icon., f. 3, . . 164
11. Pleurotoma Jickeli, Weink. Küster, Conch. Cab., t. 4, f. 2, ... 164
12. Pleurotoma variegata, Reeve (= picturata, Weink.). Reeve, Conch. Icon., f. 2, ... 164
13. Pleurotoma variegata, Kiener. Kiener, Iconog., t. 9, f. 1, ... 164
14. Pleurotoma albina, Lam. Reeve, Icon., f. 77, . . 165
15. Pleurotoma gracilina, Weink. Küster, t. 5, f. 5, . . 165
16, 16 *a*. Pleurotoma marmorata, Lam. Reeve, Icon., f. 21 *b*, 21 *a*, ... 165
17. Pleurotoma hastula, Reeve (= marmorata). Reeve, Conch. Icon., f. 139, ... 165
18. Pleurotoma Peaseana, Dunker. Küster, t. 15, f. 1–3, . 165
19. Pleurotoma picta, Beck. Reeve, Icon., f. 16, . . 163

Plate 3.

20. Pleurotoma unedo, Val. Reeve, Conch. Icon., f. 12, . 165
21. Pleurotoma undosa, Lam. Reeve, Icon., f. 18, . . 166
22. Pleurotoma fagina, Ad. and Reeve. Voy. Samarang, t. 9, f. 2, ... 167
23. Pleurotoma cingulifera, Lam. Reeve, Icon., f. 1, . 166
24. Pleurotoma Erythræa, Jickeli. Küster, t. 4, f. 10, . 166
25. Pleurotoma abbreviata, Reeve. Reeve, Icon., f. 86, . 167
26. Pleurotoma ustulata, Reeve. Reeve, Icon., f. 369 *b*, . 167
27. Pleurotoma Niponica, E. A. Smith. Zool. Proc., t. 19, f. 7, 1879, ... 172
28. Pleurotoma triporcata, Smith. Zool. Proc., t. 19, f. 9, 1879, ... 172
29, 29 *a*. Pleurotoma vertebrata, Smith (= violacea, Hds.). Zool. Proc., t. 19, f. 6, 6 *a*, 1879, ... 169
30 Pleurotoma cryptorraphe, Sowerby. Reeve, Conch. Icon., f. 7, ... 168
31. Pleurotoma Woodii, Kiener (= cryptorraphe). Kiener, Iconog., t. 7, f. 1, ... 168
32. Pleurotoma Virgo, Lam. Reeve, Conch. Icon., f. 20, . 168

Plate 4.

34. Pleurotoma Antillarum, Crosse (= Virgo, Lam.). Jour. de Conch., xiii, t. 1, f. 8, ... 168

Digitized by Google

FIGURE. PAGE.

35. Pleurotoma Jelski, Crosse (= Virgo, Lam.). Jour. de Conch., xiii, t. 1, f. 6, ... 168
37. Pleurotoma leucotropis, Ad. and Reeve (= oxytropis). Voy. Samarang, t. 10, f. 7, ... 168
38. Pleurotoma oxytropis, Sowb. Reeve, Icon., f. 17 *b*, . 168
39. Pleurotoma nobilis, Hinds (= oxytropis). Voy. Sulphur, t. 5, f. 1, ... 168
40. Pleurotoma fascialis, Lam. Reeve, Icon., f. 24 *a*, . 169
41. Pleurotoma declivis, von Martens. Conch. Mittheil., t. 9, f. 2, ... 170
42. Pleurotoma violacea, Hinds. Reeve, Icon., f. 186, . 169
43. Pleurotoma Gruneri, Phil. (= Virgo, Lam.). Küster, t. 14, f. 7, ... 168
44. Pleurotoma spiralis, E. A. Smith. Zool. Proc., t. 75, f. 8, 1871, ... 171
45. Pleurotoma brevicaudata, Reeve (= fascialis). Reeve, Icon., f. 126, ... 169
46. Pleurotoma jubata, Hinds. Reeve, Icon., f. 52, . . 171
47. Pleurotoma Renieri, Phil. (= emendata, Monts.). Küster, t. 13, f. 11, ... 172
48. Pleurotoma speciosa, Reeve. Icon., f. 9, . . . 173
49. Pleurotoma carinata, Gray. Reeve, Conch. Icon., f. 56. 173
50. Pleurotoma Gräffei, Weink. Küster, t. 3, f. 9, . . 173
51. Pleurotoma gemmata, Hinds. Reeve, Icon., f. 83, . 173
52. Pleurotoma monilifera, Pease (= gemmata). Küster, t. 15, f. 7, ... 173
53. Pleurotoma fusca, Hombr. (= gemmata). Astr. Zelee., t. 25, f. 19, ... 173
54. Pleurotoma amabilis, Jickeli (= gemmata). Küster, t. 6, f. 4, ... 173
55. Pleurotoma armillata. Reeve, Icon., f. 176, . . 174
56. Daphnella galerita, Phil. (= semicolon, Wood). Jeffreys, Brit. Conch., t. 102, f. 6, ... 309

Plate 5.

57. Surcula maculosa, Sowb. Reeve, Icon., f. 45, . . 236
58. Surcula australis, Roissy. Reeve, Icon., f. 14, . . 236
59. Clavatula cærulea, Weink. Küster, t. 7, f. 4, . . 230
60. Clavatula cærulea, Weink. Martens, Mittheil., t. 21, f. 5, 230
61. Surcula arcuata, Reeve. Reeve, Icon., f. 15, . . 236
62. Surcula tornata, Dillwyn (Javana, Reeve). Reeve, Conch. Icon., f. 26, ... 237
63. Surcula Javana, Linn. (nodifera, Lam., Reeve). Reeve, Icon., f. 28, ... 237
64. Surcula Coreanica, Ad, and Reeve (= Javana). Voy. Samarang, t. 10, f. 8, ... 237

Digitized by Google

FIGURE. PAGE.
65. Surcula lurida, Ad. and Reeve (= Javana). Voy. Samarang, t. 10, f. 5, ... 237
66. Surcula punctata, Reeve (= tuberculata). Reeve, Icon., f. 181, ... 237
67. Surcula tuberculata, Gray. Reeve, Icon., f. 72, . . 237
68. Surcula tuberculifera, Brod. Reeve, Icon., f. 63, . 238
69. Surcula olivacea, Sowb. Reeve, Icon., f. 27, . . 237
70. Surcula funiculata, Val. (= olivacea). Reeve, Icon., f. 95, ... 237
71. Surcula undatiruga, Bivona. Phil. Moll. Sicil., ii, t. 26, f. 13, ... 228
72. Surcula balteata, Beck (= undatiruga). Kiener, Iconog., t. 13, f. 2, ... 238

Plate 6.

73. Surcula tenuis, Gray. Conch. Icon., f. 73, . . . 238
74. Surcula corrugata, Kiener (= undatiruga). Kiener, Iconog., t. 9, f. 2, ... 238
75. Surcula Kaderlyi, Lischke. Küster, t. 11, f. 5, . . 239
76. Daphnella circinata, Dall. Calif. Proc., v, t. 2, f. 5, . 316
77, 77 *a*. Surcula clara, Martens. Mittheil., t. 8, f. 1, . 239
78. Surcula pluteata, Reeve. Icon., f. 101, . . . 240
79. Surcula perversa, Gabb. Pal. Calif., ii, t. 1, f. 10, . 239
80. Pleurotoma Deshayesii, Doumet (= Indica). Reeve, Icon., f. 19, ... 168
81. Surcula fulminata, Kiener (=tornata, var.). Reeve, Icon., f. 37, ... 237
82. Pleurotoma Indica, Desh. Reeve, Conch. Icon., f. 142, 168
83. Surcula annulata, Reeve. Reeve, Icon., f. 35, . . 240
84. Surcula catena, Reeve. Reeve, Icon., f. 36, . . 240
85. Surcula astricta, Reeve. Reeve, Icon., f. 98, . . 240
86. Surcula cincta, Lam. Reeve, Icon., f. 99, . . . 241
86 *a*. Surcula modesta, Sowb. (= astricta). Küster, Conch. Cab., t. 9, f. 9, ... 240
87. Surcula bijubata, Reeve. Reeve, Conch. Icon., f. 87, . 241

Plate 7.

88. Surcula versicolor, Weink. (= radula). Küster, t. 15, f. 8, 241
89. Surcula radula, Hinds. Reeve, Icon., f. 223, . . 241
90. Surcula raduliformis, Weink. (= radula). Küster, t. 19, f. 7, ... 241
91. Surcula Oweni, Gray. Reeve, Icon., f. 70, . . . 242
92. Bela nivalis, Lovén. Jeffreys, Brit. Conch., v, t. 91, f. 4, 223
93. Spirotropis modiola, Jan. (= carinatum). Jeffreys, Brit. Conch., v, t. 102, f. 7, ... 213

Digitized by Google

FIGURE. PAGE.

94. Spirotropis carinatum. Phil. Moll. Sicil., ii, t. 26, f. 19, 213
95. Surcula Quoyi, Reeve. Icon., f. 137, ... 242
96. Perona monile, Val. Kiener, Iconog, t. 15, f. 3, . 232
97. Columbarium cedonulli, Reeve (= pagoda). Reeve, Icon., f. 117 *a*, ... 175
98. Columbarium diadema, Lesson (= pagoda). Sowerby, Thes. Conch., iv, t. 410, f. 53, ... 175
99. Columbarium spinicincta, Martens (= pagoda, var.). Martens, Mittheil., t. 21, f. 1, ... 175
100. Genotia Luhdorfei, Lischke. Küster, Conch. Cab., t. 6, f. 8, ... 175
1. Genotia Mitræformis, Wood. Reeve, Icon., f. 23, . 174
2, 2 *a*. Genotia papalis, Reeve (= Mitræformis, var.). Reeve, Icon., f. 22 *a*, *b*, ... 174
3. Surcula Carpenteriana, Gabb. Pal. Calif., ii, t. 1, f. 3, 239

PLATE 8.

4. Perrona tripartita, Smith (= obesa, Rve.). Küster, Conch. Cab , t. 26, f. 12, ... 231
5. Perrona spirata, Lam. Reeve, Icon., f. 44, . . . 232
6, 7. Drillia partita, Reeve (= striata, Hinds). Reeve, Icon., f. 330 *a*, *b*, ... 211
8. Perrona Peronii, Reeve. Reeve, Icon., f. 94, . . 232
9. Perrona obesa, Reeve. Reeve, Icon., f. 29, . . 231
10, 11. Perrona lineata, Lam. Ibid., f. 96 *a*, *b*, . . . 231
12. Drillia incisa, Reeve (= Maravignæ, Biv.) Ibid., f. 133, 199
13. Clavatula imperialis, Lam. Ibid., f. 33, . . . 229
14. Perrona taxus, Chemn. Ibid., f. 25, ... 231
15. Clavatula bimarginata, Lam. (= muricata). Ibid., f. 34, 229
16. Clavatula gravis, Hinds (= muricata). Ibid., f. 202, . 229
17. Clavatula rubrifasciata, Reeve (= muricata, var.). Ibid., f. 171, ... 229
18. Clavatula diadema, Kiener (= muricata). Ibib., f. 46, 229
19. Clavatula sacerdos, Reeve (= muricata). Ibid., f. 172. 229
20. Clavatula Lelieuri, Recluz. Jour. de Conch., ii, t. 5, f. 7, 228
21. Clavatula virginea, Chemn. (= muricata). Reeve, Conch. Icon., f. 32, ... 229
22. Clavatula muricata, Lam. Reeve, Icon., f. 31, . . 229
23. Clavatula implicata, Reeve. Reeve, Icon., f. 170, . 230
24. Drillia Dunkeri, Weink. (= umbilicata, Gray). Küster, Conch Cab., t. 16, f. 2, ... 179
25. Drillia auriculifera, Lam. Reeve, Icon., f. 69, . . 185
26. Drillia exasperata, Reeve. Icon., f. 8, . . . 185
27. Clavatula mystica, Reeve (= muricata). Reeve, Icon., f. 107. 229

Digitized by Google

Plate 9.

FIGURE.		PAGE.
28.	Drillia pulchella, Reeve. Conch. Icon., f. 180,	186
29.	Drillia bilineata, Reeve (= pulchella). Reeve, Icon., f. 225,	186
30.	Drillia vidua, Hinds (= unizonalis, Lam.) Küster, Conch. Cab., t. 13, f. 1,	185
31.	Drillia echinata, Lam. Reeve, Icon., f. 48,	185
32.	Drillia læta, Hinds. Reeve, Icon., f. 155,	186
33.	Drillia vidualoides, Garrett (= unizonalis, Lam.). Proc. Philad. Acad., t. 2, f. 28, 1873,	185
34.	Drillia vidua, Reeve (= nigrozonata, Weink.). Reeve, Icon., f. 192,	185
35.	Drillia hexagona, Sowb. Reeve, Icon., f. 105,	187
36.	Drillia Beraudiana, Crosse (= Angasi, Cr.). Jour. de Conch., xi, t. 1, f. 6,	187
37.	Drillia Angasi, Crosse. Jour. de Conch., xi, t. 1, f. 5,	187
38.	Drillia unizonalis, Lam. Reeve, Conch. Icon., f. 113,	185
39.	Drillia exigua, Hombr. Voy. Astr. Zel., t. 25, f. 21,	188
40.	Drillia Beckii, Reeve. Conch. Icon., f. 10,	186
41.	Drillia mediocris, Desh. Moll. Ile Reunion, f. 39, f. 11,	187
42.	Drillia texta, Dunker. Moll. Japon., t. 1, f. 19,	207
43.	Drillia Moquiniana, Montr. Jour. de Conch., t. 7, f. 5, 1874,	207
44.	Drillia vittata, Reeve. Reeve, Conch. Icon., f. 205,	188
45.	Drillia polygonalis, Weink. Küster, Conch. Cab., t. 21, f. 7,	187
46.	Clionella semicostata, Kiener. Reeve, Conch. Icon., f. 67,	233
47. 48.	Clionella sigillata, Reeve. Reeve, Icon., f. 363 *a*, *b*.	233
49.	Clionella nux, Reeve. Reeve, Icon., f. 185,	233
50.	Clionella Buccinoides, Lam. (= sinuata, Born). Reeve, Icon., f. 68,	233
51.	Clionella rosaria, Reeve. Reeve, Icon., f. 314,	233
52.	Drillia major, Gray. Reeve, Icon., f. 59,	178
53.	Clionella striata, Kiener. Reeve, Icon , f. 144,	233
54.	Drillia gibbosa, Born. Reeve, Icon., f. 30,	179
55.	Clionella rubinicolor, Reeve. Reeve, Icon., f. 184,	233

Plate 10.

56.	Drillia flavidula, Lam. Reeve, Conch. Icon., f. 66,	177
57.	Drillia zonata, Gray (= flavidula). Ibid., f. 74,	177
58.	Drillia Stromboides, Sowb. Ibid., f. 71,	176
59.	Drillia unimaculata, Sowb. Ibid., f. 42,	180
60.	Surcula tuberculifera, Brod. Specimen.	238
61.	Drillia stolida, Hinds. Reeve, Conch. Icon., f. 152,	178
62.	Drillia, rosea, Sowb. Ibid., f. 43,	190

Digitized by Google

FIGURE. PAGE.

63. Drillia Sumatrensis, Petit (= crenularis). Jour. de Conch., iii, t. 2, f. 2, ... 178
64. Drillia crenularis, Lam. Reeve, Conch. Icon, f. 54, . 178
65. Drillia lanceolata, Reeve. Ibid, f. 182, ... 181
66. Drillia Griffithii, Gray (= crenularis). Ibid., f. 157, . 178
67. Drillia turricula, Sowb. (= Sowerbyi, Reeve). Ibid., f. 49, ... 180
68. Drillia interrupta, Lam. Ibid., f. 51, ... 181
69. Drillia Tayloriana, Reeve (crenularis, Lam.). Ibid., f. 366 *a*, ... 178
70. Drillia maura, Sowb. Ibid., f. 47, ... 181
71. Surcula brunneomaculata, Sowb. Proc. Zool. Soc., 1873, t. 59, f. 8, ... 236
72. Drillia splendidula, Sowb. Reeve, Conch. Icon., f. 60, 200
73. Drillia impages, Ad. and Reeve. Voy. Samarang, t. 9, f. 10, ... 184
74. Drillia militaris, Hinds. Reeve, Conch. Icon., f. 55, . 181
75. Drillia Appelii, Weink. Küster, Conch. Cab., t. 20, f. 5 *a*, ... 193
76. Drillia seminifera, Gould (= interrupta). Moll. Wilkes Exped., f. 312, ... 181
77. Surcula duplicata, Sowb. (= olivacea). Reeve, Icon., f. 78, ... 237

Plate 11.

78. Drillia alabaster, Reeve. Reeve, Conch. Icon., f. 65, . 179
79. Drillia Cagayanensis, Reeve. Reeve, Icon., f. 329, . 180
80. Drillia regia, Beck. Reeve, Icon., f. 75, ... 201
81. Drillia variabilis, Smith. Proc. Zool. Soc., 1878, t. 50, f. 2, ... 180
82. Drillia umbilicata, Gray. Reeve, Conch. Icon., f. 97, . 179
83. Drillia spectrum, Reeve. Ibid., f. 222, ... 200
84. Drillia Sinensis, Hinds. Ibid., f. 153, ... 201
85. Drillia putillus, Reeve. Ibid., f. 219, ... 200
86. Drillia fucata, Reeve. Ibid., f. 169, ... 189
87. Drillia tessellata, Reeve (= formosa, Rve.), $\frac{2}{1}$. Ibid., f. 331, ... 186
88. Drillia Japonica, Lischke. Küster, Conch. Cab., t. 19, f. 8, ... 202
89. Drillia sacra, Reeve. Reeve, Icon., f. 183, ... 201
90. Drillia intermaculata, Smith. Proc. Zool. Soc., 1879, t. 19, f. 19, ... 202
91. Drillia Saulcydianus, Recluz (= umbilicata). Jour. de Conch., ii, t. 5, f. 6, ... 179
92. Drillia variabilis, Smith. Proc. Zool. Soc., 1878, t. 56, f. 3, ... 180

Digitized by Google

FIGURE. PAGE.
93. Drillia paria, Reeve (= fucata, Reeve). Icon., f. 334, 189
94. Drillia intertincta, Smith (= Sinensis, Hinds). Küster, t. 22, f. 8 *a*, ... 201
95. Drillia clavata, Sowb. Reeve, Icon., f. 132, . . 190
96. Drillia peradmirabilis, Smith. Proc. Zool. Soc., 1879, t. 19, f. 12, ... 201
97. Drillia albicincta, Ad. and Reeve (= putillus). Voy. Samarang, t. 10, f. 6, ... 200
98. Clathurella semigranosa, Reeve. Reeve, Icon., f. 346, 290
99. Drillia flavonodulosa, Smith. Proc. Zool. Soc., 1879, t. 19, f. 21, ... 202
100. Drillia subobliquata, Smith. Ibid., f. 16, . . . 203
1. Drillia obliquata, Reeve. Conch. Icon., f. 262, . . 203
2. Drillia raricostata, Smith. Proc. Zool. Soc., 1879, t. 19, f. 18, ... 202
3. Drillia longispira, Smith. Proc. Zool. Soc., 1879, t. 19, f. 14, ... 202
4. Drillia humilis, Smith. Ibid., f. 20, ... 203
5. Drillia Metcalfei, Angas (= Sinensis). Proc. Zool. Soc., 1867, t. 13, f. 16, ... 201
6. Drillia Coxi, Angas (= Sinensis, Hinds). Ibid., f. 15, 201
7. Drillia denseplicata, Dunker. Küster, Conch. Cab., t. 23, f. 7, ... 203
8. Drillia candens, Smith. Proc. Zool. Soc., 1879, t. 19, f. 17, ... 203
9. Drillia spicata, Hinds (= Sinensis, Hinds). Reeve, Icon., f. 231, ... 201
10. Drillia robusta, Hinds. Reeve, Icon., f. 204, . . 180

PLATE. 12.

11. Drillia consimilis, Smith (= Sinensis, Hds.). Zool. Proc., 1879, t. 19, f. 11, ... 201
12. Drillia obliquicostata, Reeve. Conch. Icon., f. 168, . 204
13. Drillia crocata, Reeve. Ibid., f. 174, ... 204
14. Drillia exarata, Reeve. Ibid., f. 201, ... 204
15. Drillia palliata, Reeve. Ibid., f. 193, ... 204
16. Drillia aquatilis, Reeve. Ibid., f. 177, . . . 204
17. Drillia varicosa, Reeve. Ibid., f. 141 *b*, ... 205
18. Drillia castanea, Reeve. Ibid., f. 191, ... 177
19. Mangilia lucida, Nevill. Jour. Asiat. Soc. Beng., xliv, t. 8, f. 15, ... 257
20. Drillia acuminata, Mighels. Ibid., f. 14, . . . 190
21. Drillia obeliscus, Reeve. Icon., f. 175, . . . 205
22. Drillia rugifera, Sowb. (= nigerrima, Sowb.). Reeve, Icon., f. 127, ... 196

Digitized by Google

FIGURE. PAGE.

23. Drillia Solomonensis, Smith. Jour. Linn. Soc., xii, t. 30, f. 6, ... 205
24. Drillia Wilmeri, Smith. Proc. Zool. Soc., 1878, t. 50, f. 4, ... 205
25. Drillia Awamoaensis, Hutton. Specimen, . . . 208
26. Drillia bætica, Reeve. Reeve, Conch. Icon , f. 167, . 193
27. Drillia bicanalifera, Sowb. Reeve, Icon., f. 103, . . 177
28. Drillia Schillingi, Weink. Küster, Conch. Cab., t. 16, f. 7, ... 193
29. Drillia minutissima, Garrett. Proc. Phila. Acad., 1873, t. 2, f. 30, ... 207
30. Drillia Montereyensis, Stearns. Proc. Calif. Acad., v, t. 1, f. 2, ... 184
31. Drillia lauta, Pease. Am. Jour. Conch., iii, t. 15, f. 18, 206
32. Drillia pusilla, Garrett (= D. exilis, Pease). Proc. Philad. Acad., 1873, t. 2, f. 31, ... 206
33. Drillia papillosa, Garrett. Ibid., f. 29, . . . 207
34. Drillia pyramidata, Kiener. Reeve, Icon., f. 41, . . 205
35. Drillia subauriformis, Smith. Zool. Proc., 1879, t. 19, f. 23, ... 207
36. Drillia fortilirata, Smith. Ibid., f. 22, ... 207
37. Drillia æmula, Angas (= Trailli). Proc. Zool. Soc., 1877, t. 5, f. 9, ... 206
38. Drillia mœsta, Carpenter. Küster, Conch. Cab., t. 30, f. 5, ... 183
39. Drillia erosa, Schrenck, $\frac{2}{1}$. Amurl. Moll., t. 17, f. 7, . 184
40. Drillia penicillata, Carpenter (= inermis). Küster, Conch. Cab., t. 28, f. 1, ... 182
41. Drillia incisa, Carpenter. Specimen, ... 182
42. Drillia rosea, Quoy (= Novæzelandiæ). Voy. Astrol., t. 35, f. 10, ... 184
43. Drillia inermis, Hinds. Reeve, Icon., f. 64, . . 182
44. Drillia Novæzelandiæ. Reeve, Icon., f. 143, . . 184

PLATE 13.

45. Drillia sinuosa, Gray. Reeve, Conch. Icon., f. 307, . 180
46. Drillia Patagonica, d'Orb. Martens, Mittheil., t. 8, f. 3, 208
47. Drillia Patagonica, d'Orb. Voy. Amer. Merid., t. 77, f. 15, ... 208
48. Drillia Studeriana, Martens. Mittheil., t. 8, f. 2, . 209
49. Drillia Hemphilli, Stearns. Calif. Proc., v, t. 1, f. 3, . 185
50. Drillia pica, Reeve. Reeve, Conch. Icon., f. 61, . . 190
51. Drillia rosacea, Reeve. Ibid., f. 166, ... 179
52. Drillia regularis, Reeve. $\frac{3}{2}$. Ibid., f. 326, . . . 189
53. Drillia impressa, Hinds. Ibid., f. 200, ... 189
54. Drillia coccinata, Reeve. Ibid., f. 299, . . . 188

Digitized by Google

FIGURE. PAGE.
55. Drillia pudica, Hinds. Ibid., f. 199, ... 189
56. Drillia ebur, Reeve. Ibid., f. 275, ... 188
57. Drillia albicostata, Sowb. Ibid., f. 62, . . . 205
58. Pleurotoma Pateliana, Weink. Küster, Conch. Cab., t. 12, f. 7, ... 169
59. Drillia crispata, Reeve (= Loprestiana). Icon., f. 156, 209
60. Drillia corusca, Reeve. Icon., f. 89, ... 209
61. Drillia Dalli, Verrill and Smith. Trans. Conn. Acad., v, t. 57, f. 1, ... 181
62. Daphnella Carpenteri, Verrill and Smith. Ibid , f. 2, . 310
63. Drillia callosa, Val. Reeve, Conch. Icon., f. 104, . 192
64. Surcula sinistralis, Petit. Ibid., f. 81, . . . 240
65. Drillia fulva, Hinds. Ibid., f. 237, ... 210
66. Drillia Loprestiana, Calcara. Küster, Conch. Cab., t. 13, f. 8, ... 209
67. Drillia pyramidata, Kiener. Kiener, Iconog., t. 21, f. 4, 205
68. Drillia carbonaria, Reeve (= callosa, Val.). Reeve, Icon., f. 145, ... 192
69. Drillia Kennicotti, Dall. Am. Jour. Conch., vii, t. 16, f. 2, ... 209
70. Drillia Barkliensis, Adams. Proc. Zool. Soc., 1869, t. 19, f. 3, ... 192
71. Drillia strigata, Sowb. (= Barkliensis). Proc. Zool. Soc., 1873, t. 59, f. 9, ... 192
72. Drillia vexillum, Reeve. Reeve, Icon., f. 264, . . 209
73. Drillia Mariei, Crosse. Jour. de Conch., 1872, t. 2, f. 5, 190
74. Drillia incrassata, Sowb. (= Bottæ, Val.). Reeve, Icon., f. 76, ... 192
75. Drillia digitalis, Reeve. Reeve, Icon., f. 138, . . 191
76. Drillia Lamberti, Montr. Jour. de Conch., 2d ser., iv, t. 2, f. 10, ... 198
77. Drillia Rougeyroni, Souverbie (= Barkliensis). Jour. de Conch., 1874, t. 7, f. 1, ... 192

PLATE 14.

78. Drillia maura, Kiener (= Cerithoidea, Cpr.). Kiener, Iconog., t. 23, f. 1, ... 194
79. Drillia aterrima, Sowb. Reeve, Conch. Icon., f. 100, . 194
80. Drillia discors, Sowb. (= aterrima). Ibid., f. 38, . 194
81. Drillia pardalis, Hinds. Ibid., f. 196, ... 195
82. Drillia quadrifasciata, Gray. Ibid., f. 251, . . . 195
83. Drillia Melchersi, Menke (= aterrima). Specimen, . 194
84. Drillia zonulata, Reeve (= aterrima). Reeve, Conch. Icon., f. 39, ... 194
85. Drillia rudis, Sowb. Ibid., f. 53. 191
86. Drillia luctuosa, Hinds. Ibid., f. 149, ... 195

Digitized by Google

FIGURE. PAGE.

87. Drillia scarabæus, Reeve, ⅔. Ibid., f. 353, . . . 195
88. Drillia rustica, Sowb. (= nigerrima). Ibid., f. 91, . 196
89. Drillia unicolor, Sowb. (= nigerrima). Ibid., f. 92, . 196
90. Drillia excentrica, Sowb. (= rudis, Sowb.) Ibid., f. 58, 191
91. Drillia nigerrima, Sowb. Ibid., f. 102, . . . 196
92. Drillia paxillus, Reeve. Ibid., f. 285, ... 194
93. Drillia torosa, Carpenter. Specimen, ... 183
94. Drillia Harfordiana, Reeve (= nigerrima, var.). Reeve, Conch. Icon., f. 93, ... 194
95. Drillia Hondurasensis, Reeve. Ibid., 318, . . . 194
96. Drillia flavescens, Reeve. Ibid., f. 178, . . . 194
97. Drillia fuscescens, Gray. Ibid., f. 125, . . . 193
98. Drillia cuprea, Reeve (= fuscescens, Gray). Ibid., f. 140, ... 193
99. Drillia harpularia, Desmoul. Ibid., f. 124, . . . 193
100. Drillia bicolor, Sowb. Ibid., f. 40, ... 196
1. Drillia granulosa, Sowb. Ibid., f. 90, ... 196
2. Drillia zebra, Lam. Ibid., f. 135, ... 196
3. Drillia Dysoni, Reeve. Ibid., f. 315, ... 198
4. Drillia Lysidia, Duclos. Chenu, Ill. Conch. Columbella, t. 26, f. 16, ... 198
5. Drillia albinodata, Reeve (= zebra, Lam.). Reeve, Conch. Icon., f. 352, ... 196
6. Drillia zebra, Lam, Küster, Conch. Cab., t. 23, f. 4, . 196
7. Drillia collaris, Sowb. (= zebra). Reeve, Icon., f. 120, 196
8. Drillia pallida, Sowb. Reeve, Icon., f. 134, . . 196
9. Clathurella monilifera, Sowb. Thes. Conch., i, t. 40, f. 177, ... 278
10. Drillia cinerea, Weink. (= zebra). Küster, Conch. Cab., t. 23, f. 1, ... 196
11. Drillia albomaculata, Orb. (= zebra). Orb., Moll. Cuba, t. 24, f. 16, ... 166
12. Drillia ornata, Orb. (= zebra). Ibid., t. 23, f. 26, . 196

PLATE 15.

13. Drillia nigrescens, Gray (= fuscescens). Reeve, Conch. Icon., f. 235, ... 193
14. Drillia mucronata, Reeve. Reeve, Icon., f. 328, . . 198
15. Drillia zebroides, Weink. (= zebra). Küster, Conch. Cab., t. 23, f. 8, ... 196
16. Drillia Clionellæformis, Weink. Ibid., t. 23, f. 5, . 198
17. Drillia rubiginosa, Hinds. Reeve, Conch. Icon., f. 226, 199
18. Drillia pulchra, Gray (= zebra). Ibid., f. 351, . . 196
19. Drillia cancellata, Gray. Ibid., f. 317, . . . 197
20. Drillia nitida, Kiener. Ibid., f. 130, ... 199
21. Mangilia papillaris, Hinds. Ibid., f. 335, . . . 256

Digitized by Google

FIGURE. PAGE.
22. Drillia cantharis, Reeve. Ibid., f. 272, . . . 199
23. Drillia Pagoda, Reeve. Ibid., f. 242. 210
24. Clathurella tessellata, Hinds. Ibid., f. 244, . . . 297
25. Drillia exilis, Pease. Am. Jour. Conch., iii, t. 15, f. 19, 206
26. Drillia donata, Hinds. Reeve, Conch. Icon., f. 228, . 210
27. Drillia arata, Reeve. Conch. Icon., f. 267, . . . 210
28. Clathurella lemniscata, Nevill. Jour. Asiat. Soc. Beng., 1875, t. 7, f. 11, ... 297
29. Clathurella Nassoides, Gray. Reeve, Conch. Icon., f. 259, ... 296
30. Drillia Pagoda, Reeve (= turris, Reeve). Ibid., f. 344, 210
31. Clathurella Grayi, Reeve. Ibid.. f. 232, . . . 296
32. Mangilia apicata, Gray. Ibid., f. 305, . . . 266
33. Clathurella vultuosa, Reeve. Ibid., f. 273, . . . 296
34. Mangilia rubida, Hinds. Ibid., f. 220, . . . 271
35. Mangilia neglecta, Hinds. Ibid., f. 218, . . . 267
36. Clathurella compta, Reeve (= vultuosa, Reeve). Ibid., f. 292, ... 296
37. Mangilia spurca, Hinds. Ibid., f 312, ... 273
38. Mangilia cinerea, Hinds. Ibid., f. 195, . . . 273
39. Mangilia margaritifera, Gray. Ibid., f. 354, . . 258
40. Mangilia argillacea, Hinds. Ibid., f. 317, . . . 273
41. Mangilia candida, Hinds. Ibid., f. 221, . . . 273
42. Clathurella languida, Reeve. Ibid., f. 257, . . . 296
43. Mangilia dædalea, Reeve (= margaritifera). Ibid., f. 355, ... 258
44. Mangilia cardinalis, Reeve. Ibid., f. 266, . . . 258
45, 47. Mangilia crassilabrum, Reeve. Ibid., f. 118 *a*, *b*, . 258
46. Clathurella Hayesiana, Angas. Zool. Proc., 1871, t. 1, f. 17, ... 281
48. Clathurella concentricostata. Reeve, Icon., f. 279, . 258

PLATE 16.

49. Clathurella oxyclathrus, Martens. Martens, Mittheil., t. 9, f. 1, ... 283
50. Clathurella octangula, Dunker. Dunker, Moll. Japon., t. 1, f. 18, ... 283
51. Clathurella sculptilis, Angas. Proc. Zool. Soc., 1871, t. 1, f. 19, ... 282
52. Clathurella tenuilirata, Angas. Ibid., f. 18, . . 281
53. Mangilia Bertiniana, Tapp.-Canefri (= rubida). Bull. Soc. Zool., iii, t. 6, f. 7, ... 271
54. Mangilia roseotincta, Montrouz. Jour. de Conch., 1873, t. 4, f. 1, ... 272
55. Clathurella Robillardi, Barclay. Proc. Zool. Soc., 1869, t. 19, f. 2, ... 284

Digitized by Google

FIGURE. PAGE.

56. Clathurella lirata, Reeve. Reeve, Conch. Icon., f. 281, 296
57. Mangilia albicans, Hinds. Reeve, Conch. Icon., f. 243, 259
58. Mangilia albovirgulata, Souv. Jour. de Conch., 1860, t. 2, f. 12, ... 274
59. Mangilia metula, Hinds. Reeve, Conch. Icon., f. 238, 269
60. Mangilia variculosa, Sowb. Reeve, Icon., f. 194, . 257
61. Clathurella bicolor, Angas. Proc. Zool. Soc., 1871, t. 1, f. 20, ... 284
62. Mangilia aspera, Hinds. Reeve, Conch. Icon., f. 224, 269
63. Mangilia quisqualis, Hinds. Ibid., f. 230, . . . 257
64. Mangilia rigida, Hinds. Ibid., f. 216, ... 269
65. Mangilia Dorvilliæ, Gray, $\frac{2}{3}$. Ibid., f. 249, . . . 267
66. Clathurella efficta, Reeve (= vultuosa). Ibid., f. 302, 296
67. Mangilia cælata, Hinds. Ibid., f. 241, . . . 258
68, 70. Clathurella Delosensis, Reeve (= clathrata, Serres). Ibid., f. 365 *a*, *b*, ... 276
69. Clathurella nexa, Reeve. Ibid., f. 282, . . . 287
71. Mangilia ericea, Hinds. Ibid., f. 188, ... 258
72. Clathurella parvula, Reeve. Ibid., f. 254, . . . 288
73. Clathurella foveolata, Reeve. Ibid., f. 342, . . 288
74. Clathurella reflexa, Reeve. Ibid., f. 252, . . . 288
75. Clathurella albifuniculata, Reeve (= tincta). Ibid., f. 350, ... 292
76. Clathurella tincta, Reeve. Ibid., f. 347, . . . 292
77. Clathurella obtusa, Reeve. Ibid., f. 356, . . . 294
78. Clathurella scalaris, Hinds. Ibid., f. 233, . . . 287
79. Clathurella puncticincta, Reeve. Ibid., f. 258, . . 290
80. Clathurella granicostata, Reeve. Ibid., f. 323, . . 287
81. Clathurella Philippinensis, Reeve. Ibid., f. 109 *a*, . 287
82. Clathurella fimbriata, Hinds. Ibid., f. 208, . . 288
83. Clathurella retusa, Hinds. Ibid., f. 234, . . . 290

Plate 17.

84. Clathurella albocincta, Angas. Proc. Zool. Soc., 1871, t. 1, f. 22, ... 285
85. Clathurella pustulata, Angas. Proc. Zool. Soc., 1877, t. 5, f. 14, ... 285
86. Clathurella Lallamantiana, Crosse (= Letourneuxiana, var.). Jour. de Conch., 1865, t. 11, f. 5, . . . 286
87. Clathurella Letourneuxiana, Crosse. Ibid., f. 7, . 286
88. Clathurella rufinodis, Martens (= granicostata). Martens, Mauritius, t. 20, f. 2, ... 287
89. Clathurella zonulata, Angas. Proc. Zool. Soc., 1867, t. 13, f. 17, ... 285
90. Clathurella bicarinata, Pease. Am. Jour. Conch., iii, t. 15, f. 23, ... 287

Digitized by Google

FIGURE. PAGE.

91. Daphnella Vincentina, Crosse. Jour. de Conch, 1865, t. 11, f. 6, ... 311
92. Clathurella modesta, Angas. Proc. Zool. Soc., 1877, t. 5, f. 15, ... 285
93. Clathurella Brenchleyi, Angas. Ibid., f. 12, . . 285
94. Clathurella gracilispira, Smith. Proc. Zool. Soc., 1879, t. 19, f. 25, ... 286
95. Clathurella carinulata, Souverb. Jour. de Conch., 1875, t. 13, f. 6, ... 289
96. Clathurella rubroguttata, H. Ad. (= tincta). Proc. Zool. Soc., 1872, t. 3, f. 25, ... 292
97. Borsonia nigrocincta, Montrouz. Jour. de Conch., 1873, t. 4, f. 2, ... 228
98. Clathurella Brazieri, Angas. Zool. Proc., 1871, t. 1, f. 21, 295
99. Clathurella pulcherrima, H. Adams. Zool. Proc., 1872, t. 3, f. 26, ... 289
100. Clathurella rufozonata, Angas. Zool. Proc., 1877, t. 5, f. 13, ... 285
1. Lachesis multiplicata, Forbes. (Enl.?) Reeve, Conch. Icon., f. 64 *b*, ... 225
2. Clathurella arctata, Reeve. Reeve, Conch. Icon., f. 294, 294
3. Clathurella Polynesiensis, Reeve. Reeve, Icon., f. 304, 291
4. Clathurella bilineata, Angas. Zool. Proc., 1871, t. 1, f. 23, 288
5. Clathurella eximia, Reeve. Reeve, Conch. Icon., f. 82, 290
6. Clathurella amabilis, Hinds. Ibid., f. 308, . . . 287
7. Clathurella foraminata, Reeve. Ibid., f. 301, . . 288
8. Clathurella micans, Hinds. Ibid., f. 227, . . . 290
9. Clathurella canaliculata, Reeve. Ibid., f. 348, . . 284
10. Clathurella cavernosa, Reeve. Ibid., f. 303 . . 290
11. Mangilia fusoides, Reeve (= gracilenta). Ibid., f. 349, 252
12. Clathurella Hindsii, Reeve. Ibid., f. 119, . . . 289
13. Clathurella glumacea, Hinds. Ibid., f. 240, . . 291
14. Clathurella sculpta, Hinds. Ibid., f. 154, . . . 280
15. Clathurella tricarinata, Val. Ibid., f 121 *b*, . . 289
16. Clathurella debilis, Hinds. Ibid., f. 187, . . . 282
17. Clathurella Metcalfiana, Reeve. Ibid., f. 229, . . 288
18. Clathurella felina, Hinds. Ibid., f. 80, . . . 292
19. Clathurella dentifera, Hinds. Ibid., f. 236, . . . 291
20. Clathurella pyramidula, Reeve. Ibid., f. 260, . . 286

PLATE 18.

21. Mangilia obesicostata Reeve (= Guarani). Conch. Icon., f. 265, ... 247
22. Clathurella angulifera, Reeve. Ibid., f. 360, . . 278
23. Clathurella d'Orbignyi, Reeve (= candidula). Ibid., f. 359, ... 278

Digitized by Google

FIGURE. PAGE.
24. Clathurella candidula, Reeve. Ibid., f 358, . . 278
25. Clathurella clathrata, Reeve (= candidula). Ibid., f. 361, 278
26. Clathurella turbinelloides. Reeve. Ibid., f. 295, . . 280
27. Clathurella macrostoma, Reeve. Ibid., f. 362, . . 279
28. Clathurella occidentalis, Reeve. Ibid., f. 357, . . 279
29. Clathurella rubricata, Reeve. Ibid., f. 321, . . 279
30. Mangilia laqueata, Reeve. Ibid., f. 280, . . . 246
31. Clathurella quadrata, Reeve. Ibid., f. 253, . . 278
32. Clathurella merita, Hinds. Ibid., f. 148, . . . 280
33. Clathurella Leufroyi, Mich. Ibid., f. 131, . . . 276
34. Clathurella linearis, Mont. Ibid., f. 296, . . . 276
35. Clathurella reticulata, Ren. (= Cordieri, Payr.). Ibid., f. 122, ... 275
36. Mangilia costata, Gray (= trilineata, Ads.). Ibid., f. 298, ... 247
37. Daphnella Forthinensis, Reeve (= accincta, Montg.). Ibid., f. 246, ... 310
38. Daphnella gracilis, Mont. Ibid., f. 50, . . . 312
39. Daphnella teres, Forbes (= anceps, Eichw.). Ibid., f. 161, ... 312
40. Clathurella purpurea, Blainv. Ibid., f. 136, . . 275
41. Clathurella purpurea, var. Philberti. Ibid., f. 129, . 275
42. Clathurella rava, Hinds. Ibid., f. 250, . . . 296
43. Clathurella scalpta, Reeve (= monilifera, Sowb.). Ibid., f. 338, ... 278
44. Clathurella Guildingii, Reeve. Ibid., f. 268, . . 279
45. Daphnella Forbesii, Reeve (= brachystoma, Phil.). Ibid., f. 339, ... 308
46. Clathurella occata, Hinds. Ibid., f. 197, . . . 280

PLATE 19.

47. Clathurella Martensi, Nevill. Jour. Asiat. Soc. Beng., 1875, t. 7, f. 8, ... 291
48. Clathurella Blanfordi, Nevill. Ibid., f. 14, . . . 291
49. Clathurella Smithii, Nevill. Ibid., t. 8, f. 13, . . 292
50. Mangilia apiculata, Montr. Jour. de Conch., 3d ser., iv, t. 10, f. 2, ... 273
51. Mangilia canaliculata, Pease (= rubida, Hinds). Am. Jour. Conch., iii, t. 15, f. 17, ... 271
52. Clathurella scalarina, Deshayes. Moll. Reunion, t. 12, f. 12, ... 296
53. Clathurella albostrigata, Baird. Voy. Curacoa, t. 37, f. 3, ... 292
54. Clathurella cyclophora, Deshayes. Moll. Reunion, t. 12, f. 19, ... 292

Digitized by Google

FIGURE. PAGE.
55. Clathurella contortula, Nevill. Jour. Asiat. Soc. Beng., 1875, t. 7, f. 12, ... 294
56. Clathurella Reeveana, Deshayes. Moll. Reunion, t. 12, f. 5, ... 291
57. Clathurella rugosa, Migh. Donum Bism., t. 1, f. 5, . 296
58. Clathurella Enginæformis, Nevill. Jour. Asiat. Soc. Beng., 1875, t. 7, f. 9, ... 294
59. Clathurella Armstrongi, Nevill. Ibid., f. 13, . . 294
60. Clathurella Masoni, Nevill. Ibid., f. 7, . . . 293
61. Clathurella singularis, Nevill. Ibid., f. 10, . . . 293
62. Borsonia nigrocincta, Montr. Ibid., f. 6, . . . 228
63. Clathurella producta, Pease. Donum Bismark, t. 1, f. 3, ... 298
64. Mangilia obesa, Garrett. Phila. Proc., 1873, t. 2, f. 36, 273
65. Clathurella perplexa, Nevill. Jour. Asiat. Soc. Beng., 1875, t. 7, f. 5, ... 298
66. Clathurella dædalea, Garrett. Proc. A. N. S. Philad., 1873, t. 2, f. 33, ... 294
67. Clathurella clandestina, Deshayes. Moll. Reunion, t. 12, f. 15, ... 298
68. Clathurella pumila, Mighels. Donum Bism., t. 1, f. 2, 298
69. Clathurella infrasulcata, Garrett (=cavernosa). Proc. A. N. S. Phila., 1873, t. 2, f. 35, ... 290
70. Clathurella maculosa, Pease. Am. Jour. Concl., iii, t. 15, f. 16, ... 293
71. Clathurella Nagasakiensis, Smith. Zool. Proc., 1879, t. 19, f. 13, ... 286
72. Clathurella semilineata, Garrett (= granosa, Dunker). Phila. Proc., 1873, t. 2, f. 37, ... 295
73. Clathurella Darnleyensis, Brazier. Specimen, . . 256
74. Clathurella punctifera, Garrett. Phila. Proc, 1873, t. 2, f. 39, ... 293
75. Clathurella tumida, Pease (= Reeveana, Desh.). Am. Jour. Conch., iii, t. 15, f. 14, ... 291

PLATE 20.

76. Clathurella, purpurata, Souv. Jour. de Conch., 3d ser., i, t. 11, f. 8, ... 298
77. Mangilia Montrouzieri, Souv. Ibid., f. 7, . . . 273
78. Clathurella torquata, Phil. Moll. Sicil., ii, t. 26, f. 14, 275
79. Clathurella scabrum, Jeffreys (= Cordieri, Payr.). Ann. Mag. N. Hist., 3d ser., ii, t. 5, f. 9 *b*, . . 275
80. Clathurella affinis, Dall. Calif. Proc., v, t. 2, f. 7, . 281
81. Clathurella violacea, Pease (= clandestina, Desh.). Am. Journ. Conch., iii, t. 15, f. 15, ... 298
82. Clathurella Antillarum, d'Orb. Cuba, t. 24, f. 2, . 279

Digitized by Google

FIGURE. PAGE

83. Clathurella Auberiana, d'Orb. (= rubricata, Reeve). Cuba, t. 24, f. 5, ... 279
84. Clathurella elatior, d'Orb. Cuba, t. 23, f. 35, . . 279
85. Clathurella Lavalleana, d'Orb. (= Antillarum). Cuba, t. 24, f. 7, ... 279
86. Daphnella amœna, Sars. Moll. Norv., t. 17, f. 10 *a*, . 313
87. Clathurella Caribæa, d'Orb. Cuba, t. 23, f. 32, . . 279
88. Clathurella Vespucciana, d'Orb. (= Antillarum). Cuba, t. 24, f. 13, ... 279
89. Clathurella labiosa, Smith. Zool. Proc., 1871, t. 75, f. 9. 292
90. Clathurella pulchella, Garrett (= purpurascens, Dkr.). Phila. Proc., 1873, t. 2, f. 32, ... 298
91. Clathurella Canfieldi, Dall. Am. Jour. Conch., vii, t. 15, f. 9, ... 280
92. Clathurella Jewetti, Stearns (= plicata, Ads.). Proc. Phila. Acad., 1873, p. 346, ... 277
93. Clathurella Candeana, d'Orb. Cuba, t. 24, f. 10, . 279
94. Mangilia subula, Reeve. Reeve, Icon., f. 211, . . 270
95. Clathurella inflexa, Martens. Mittheil., t. 21, f. 10, . 280
96. Clathurella pinguis, Garrett (= Malleti, Recluz). Phila. Proc., 1873, t. 2, f. 38, ... 297
97. Daphnella polita, Hinds. Reeve, Icon., f. 150, . . 311
98. Mangilia sordida, Reeve. Icon., f. 286, . . . 254
99. Clathurella cælata, Garrett. Phila. Proc., 1873, t. 2, f. 34, ... 295
100. Clathurella Malleti, Recluz. Jour. de Conch., iii, t. 10, f. 2, ... 297
1. Mangilia hexagonalis, Reeve. Reeve, Icon., f. 293, . 251
2. Mangilia nitens, Hinds. Ibid., f. 189, ... 253
3. Mangilia pseudocarinata, Reeve. Ibid., f. 256, . . 254
4. Mangilia obeliscus, Reeve (= hexagonalis). Ibid., f. 56, 251
5. Mangilia opalus, Reeve. Ibid., f. 274, . . . 253
6. Daphnella ignifera, Reeve. Ibid., f. 214, . . . 302

PLATE 21.

7. Daphnella Ægeensis, Forbes (= turgida, Forbes). Reeve, Conch. Icon., f. 164, ... 308
8. Bela septangularis, Montg. Ibid., f. 322, . . . 223
9. Bela Ginnaniana, Scacchi (? = septangularis). Ibid., f. 45, ... 223
10. Mangilia Sicula, Reeve. Ibid., f. 1, ... 244
11. Daphnella lævigata, Phil. (= nebula). Ibid., f. 291, . 307
12. Mangilia Bertrandi, Payr. Ibid., f. 46, . . . 244
13. Mangilia tæniata, Desh. Ibid., f. 351, ... 243
14. Clathurella lineolata, Gray. Ibid., f. 337, . . . 295
15. Daphnella abyssicola, Forbes. Ibid., f. 157, . . 309

Digitized by Google

FIGURE. PAGE.
16. Daphnella minuta, Forbes. Ibid., f. 158, . . . 309
17. Mangilia Vauquelini, Payr. Ibid., f. 108, . . . 243
18. Mangilia rigida, Reeve (= Vauquelini). Ibid., f. 40, 243
19. Daphnella striolata, Scacchi (= costulata, Bl.). Ibid., f. 320, ... 309
20. Daphnella nebula, Mont. Ibid., f. 198, . . . 307
21. Daphnella Cycladensis, Forbes (= brachystoma, Phil.). Ibid., f. 289, ... 308
22. Drillia affinis, Gray (= flavescens. Reeve). Ibid., f. 309, ... 194
23. Daphnella Lœviana, Forbes (= costulata, Blainv.). Ibid., f. 290, ... 309
24. Daphnella attenuata, Mont. Ibid., f. 248, . . . 308
25. Daphnella turgida, Forbes. Ibid., f. 163, . . . 308
26. Mangilia cavernosa, Reeve. Ibid., f. 8, . . . 251
27. Mangilia Dysoni, Reeve. Ibid., f. 29, ... 247
28. Mangilia planilabroides, Tryon (= planilabrum, Rve.). Ibid., f. 43, ... 263
29. Daphnella fortis, Forbes (= turgida, Fbs.). Ibid., f. 165, ... 308
30. Mangilia pentagonalis, Gray. Ibid., f. 255, . . 246
31. Mangilia trifasciata, Gray (= bilineata, C. B. Ad.). Ibid., f. 297, ... 247
32. Mangilia luteofasciata, Reeve (= albovittata, Ad.). Ibid., f. 239, ... 248
33. Daphnella hyalina, Reeve, Ibid., f. 287, . . . 301
34. Mangilia undaticosta, Reeve. Ibid., f. 284, . . 251
35. Mangilia bella, Hinds. Ibid., f. 146, ... 249
36. 37. Daphnella pessulata, Reeve. Ibid., f. 115 *a*, *b*, . 311
38. Mangilia formicaria, Sowb. Ibid., f. 247, . . . 250
39. Daphnella plumbea, Hinds. Ibid., f. 151, . . . 300
40. Mangilia symmetrica, Reeve. Ibid., f. 340, . . 247
41. Mangilia badia, Reeve. Ibid., f. 60, ... 247

PLATE 22.

42. Bela secalina, Phil. (septangularis). Moll. Sicil., ii, t. 26, f. 9, ... 223
43. Daphnella cerina, Kurtz and Stimpson. Shells N. Eng., t. 2, f. 2, ... 310
44. Mangilia rugulosa, Phil. Moll. Sicil., ii, t. 26, f. 8, . 245
45. Daphnella brachystoma, Phil. Ibid., f. 10, . . . 308
46. Mangilia Guarani, d'Orb. Voy. Amer., t. 77, f. 14, . 247
47. Mangilia luctuosa, d'Orb. Cuba, t. 23, f. 29, . . 246
48. Mangilia Fairbankii, Nevill. Jour. Asiat. Soc. Beng., 1875, t. 7, f. 2, ... 270

Digitized by Google

FIGURE. PAGE.

49. Daphnella decussata, Phil. (= nuperrima, Tiberi). Moll. Sicil., ii, t. 26, f. 23, ... 307
50. Mangilia brevis, Pease (= cithara, Gould). Am. Jour. Conch., iii, t. 15, f. 11, ... 263
51. Mangilia gemmulata, Deshayes (= interrupta, Reeve). Moll. Reunion, t. 12, f. 8, ... 265
52. Mangilia fulvocincta, Nevill. Jour. Asiat. Soc. Beng., 1875, t. 7, f. 1, ... 252
53. Mangilia multilineolata, Deshayes. Expl. Morée, t. 19, f. 46. 244
54. Daphnella variegata, Carpenter. Specimen, . . 300
55. Mangilia splendida, A. Ad. Zool. Proc., 1867, t. 19, f. 24, ... 255
56. Mangilia interlirata, Stearns. Cal. Proc., iv, t. 1, f. 10, 248
57. Daphnella interfossa, Carpenter. Specimen, . . 310
58. Mangilia Coppingeri, Smith. Zool. Proc., 1881, t. 4, f. 2, ... 255
59. Daphnella fulgurans, Krauss. Sudaf. Moll., t. 6, f. 11, 311
60. Mangilia robusticostata, Smith. Zool. Proc., 1879, t. 19, f. 28, ... 255
61. Mangilia insculpta, Ad. and Angas. Zool. Proc., 1863, t. 37, f. 8, ... 256
62. Mangilia costulata, Dunker. Moll. Japon., t. 1, f. 20, . 255
63. Mangilia trivittata, Ad. and Reeve (= pellucida). Moll. Samarang, t. 10, f. 9, ... 266
64. Clathurella apicalis, Montr. (= felina, Hinds). Jour. de Conch., 3d ser., i, t. 11, f. 6, ... 292
65. Mangilia coniformis, Souverb. (= Souverbiei). Jour. de Conch., 1875, t. 13, f. 5, ... 264
66. Mangilia vittata, Hinds. Voy. Sulph., t. 9, f. 3, . . 269
67. Mangilia angulosa, Smith. Zool. Proc., 1871, t. 75, f. 10, ... 256
68. Mangilia flavescens, Angas. Zool. Proc., 1877, t. 5, f. 11, ... 256
69. Mangilia scalata, Souverb. (= angicostata). Jour. de Conch., 1874, t. 7, f. 4, ... 252
70. Mangilia Leuckarti, Dunker (= costulata). Moll. Japon., t. 1, f. 1, ... 255
71. Mangilia Deshayesii, Dunker. Ibid., t. 1, f. 3, . . 256
72. Mangilia picta, Ad. and Angas. Zool. Proc., 1863, t. 37, f. 7, ... 256
73. Daphnella Jacksonensis, Angas. Zool. Proc., 1877, t. 5, f. 10, ... 311

PLATE 23.

74, 75. Mangilia interrupta, Reeve. Conch. Ic., f. 16 *a*, *b*, 265
76. Mangilia pura, Reeve. Ibid., f. 63, ... 254

Digitized by Google

FIGURE. PAGE.

77. Mangilia, lineata, Reeve. Ibid., f. 42, ... 253
78. Mangilia pallida, Reeve. Ibid., f. 34, ... 252
79. Mangilia zonata, Reeve. Ibid., f. 15, ... 254
80. Mangilia livida, Reeve. Ibid., f. 28, ... 253
81. Daphnella casta, Hinds. (= Reeveana, Tryon). Ibid., f. 55, ... 305
82. Mangilia gracilis, Reeve. Ibid., f. 13, v, . . . 267
83. Mangilia fulva, Reeve (= lutescens, Reeve). Ibid., f. 271, ... 253
84. Mangilia castanea, Reeve. Ibid., f. 48, . . . 255
85. Mangilia angicostata, Reeve. Ibid., f. 327, . . . 252
86. Mangilia semen, Reeve. Ibid., f. 333, ... 254
87. Mangilia planilabrum. Ibid., f. 88, ... 263
88. Mangilia contracta, Reeve (= gracilenta). Ibid., f. 116, ... 251
89. Mangilia clara, Reeve. Ibid., f. 190, ... 252
90. Clathurella albibalteata, Reeve (= Cumingii, Powis). Ibid., f. 84, ... 283
91. Clathurella Tritonoides, Reeve. Ibid., f. 85, . . 283
92. Mangilia cylindrica, Reeve. Ibid., f. 9 *b*, . . . 267
93. Mangilia pyramidalis, Reeve. Ibid., t. 5, f. 13, . . 261
94. Mangilia oryza, Hinds. Ibid., f. 37, ... 259
95. Mangilia vitrea, Reeve. Ibid., f. 300, ... 254
96. Mangilia Zebuensis, Reeve (= derelicta, Rve.). Ibid., f. 68, ... 266
97. Daphnella urnula, Reeve. Ibid., f. 245, . . . 306
98. Mangilia gracilenta, Reeve. Ibid., f. 114, . . . 251
99. Mangilia cornea, Reeve. Ibid., f. 341, . . . 253
100. Daphnella æruginosa, Reeve. Ibid., f. 261, . . 311
1. Mangilia Stromboides, Reeve. Ibid., f. 33, . . . 264
2. Mangilia fusiformis, Reeve. Ibid., f. 19, . . . 268
3. Mangilia elegans, Reeve. Ibid., f 41, . . . 264
4. Mangilia conohelicoides, Reeve. Ibid., f. 25, . . 262
5. Mangilia ponderosa, Reeve. Ibid., f. 44, . . . 262

PLATE 24.

6. Mangilia vittata, Reeve (= exquisita, Smith). Reeve, Conch. Icon., f. 53, ... 269
7. Mangilia gracilis, Reeve. Ibid., f. 13 *a*, . . . 267
8. Mangilia vexillum, Reeve. Ibid., f. 2 *a*, . . . 265
9. Mangilia cylindrica, Reeve. Ibid., f. 9 *b*, . . . 267
10. Mangilia reticulata, Reeve. Ibid., f. 17, . . . 262
11. Mangilia balteata, Reeve. Ibid., f. 57, . . . 247
12. Mangilia Antillarum, Reeve. Ibid., f. 4 *b*, . . . 261
13. Mangilia cytharella, Lam. Ibid., f. 5, ... 257
14. Mangilia lyra, Reeve (= cytharella). Ibid., f. 3, . 257

Digitized by Google

FIGURE. PAGE.

15. Mangilia gracilis, Reeve. Ibid., f. 11 *a*, . . . 267
16. Mangilia funiculata, Reeve. Ibid., f. 7, . . . 267
17. Mangilia Columbelloides, Reeve (= Marginelloides). Ibid., f. 24 *b*. 261
18. Mangilia pusilla, Reeve (= funebris, Reeve). Ibid., f. 50, ... 251
19. Mangilia abyssicola, Reeve. Ibid., f. 30 *a*, . . . 260
20. Mangilia pulchella, Reeve. Ibid., f. 18 *a*, . . . 265
21. Mangilia lyrica. Ibid., f. 20 *b*, ... 268
22. Mangilia Marginelloides, Reeve. Ibid., f. 6 *a*, . . 261
23. Mangilia turricula, Reeve. Ibid., f. 53, . . . 268
24. Mangilia gibbosa, Reeve. Ibid., f. 21, . . . 266
25. Mangilia Novæ-Hollandiæ, Reeve (= gibbosa, Rve.). Ibid., f. 27, ... 266
26. Mangilia astricta, Reeve. Ibid., f. 59, . . . 260
27. Mangilia funebris, Reeve. Ibid., f. 32, . . . 251
28. Mangilia angulata, Reeve. Ibid., f. 62, . . . 259
29. Mangilia cincta, Reeve. Ibid., f. 69, ... 259
30. Mangilia derelicta, Reeve. Ibid., f. 66, . . . 266
31. Mangilia pellucida, Reeve. Ibid., f. 61, . . . 266

Plate 25.

32. Mangilia Delacouriana, Crosse. Jour. de Conch., 1872, t. 2, f. 4, ... 263
33. Mangilia dædalea, Pease (= debilis, Pse.). Am. Jour. Conch , iii, t. 15, f. 13, ... 270
34. Mangilia angela, Ad. and Angas. Zool. Proc., 1863, t. 3, f. 21, ... 267
35. Mangilia Balansai, Crosse. Jour. de Conch., 1873, t. 5, f. 5, ... 264
36. Mangilia bella, Ad. and Angas (= Boakei, Nevill). Zool. Proc., 1863, t. 37, f. 6, ... 270
37. Mangilia decussata, Pease. Am. Jour. Conch., iii, t. 15, f. 10, ... 263
38. Clathurella alba, Desh. Moll. Reunion, t. 12, f. 17, . 296
39. Daphnella varicifera, Pease. Am. Jour. Conch., iii., t. 15, f. 21, ... 301
40. Mangilia Isseli, Nevill. Jour. Bengal, 1875, t. 7, f. 17, 272
41. Daphnella dentata, Souverb. Jour. de Conch., xviii, t. 14, f. 5, ... 305
42. Mangilia dubiosa, Nevill. Jour. Bengal, 1875, t. 7, f. 18, ... 264
43. Mangilia cithara, Gould. Wilkes Exped. Moll., f. 3 *b*, 263
44. Mangilia gradata, Nevill. Jour. Bengal, 1875, t. 7, f. 15, 262
45. Mangilia Richardi, Crosse (= reticulata, Rve.). Jour. de Conch., 1872, t. 2, f. 3, ... 262

Digitized by Google

FIGURE. PAGE.

46. Mangilia onager, Souverb. Jour. de Conch., 1875, t. 13, f. 4, ... 272
47. Mangilia Guestieri, Souverb. (= reticulata, Rve.). Jour. de Conch., 1873, t. 4, f. 3, ... 262
48. Mangilia Isseli, var. cernica, Nevill. Jour. Bengal, 1875, t. 7, f. 16, ... 272
49. Daphnella compta, Ad. and Angas. Zool. Proc., 1863, t. 37, f. 5, ... 306
52. Mangilia unilineata, Smith. Jour. Linn. Soc., xii, t. 30, f. 13, ... 272
51. Mangilia triticea, Kiener. Iconog., t. 27, f. 3, . . 268
50. Mangilia interstriata, Smith. Jour. Linn. Soc., xii, t. 30, f. 13, ... 272
53. Mangilia biclathrata, Souverb. Jour. de Conch., 1873, t. 4, f. 4, ... 272
54. Daphnella trivaricosa. Martens. Mauritius, t. 20, f. 1, 305
55. Daphnella crenulata, Pease. Am. Jour. Conch., iii, t. 15, f. 20, ... 304
56. Clathurella subzonata, Smith. Zool. Proc., 1879, t. 19, f. 27, ... 284
57. Daphnella vitrea, Garrett. Proc. Philad. Acad., 1873, t. 3, f. 60, ... 303
58. Borsonia Giliberti, Souverb. Jour. de Conch., 1874, t. 7, f. 2, ... 228
59. Clathurella fuscobalteata, Smith. Zool. Proc., 1879, t. 19, f. 26, ... 284
60. Daphnella Lymneiformis, Kiener. Iconog., t. 22, f. 3, . 300
61. Daphnella aspera, Carp. Specimen, ... 317
62. Daphnella gracilior, Hemphill. Specimen, . . . 317
63. Daphnella filosa, Carp. Specimen, ... 317

Plate 26.

64. Mangilia abyssicola, Reeve. Conch. Icon., f. 30 *b*, . 260
65. Mangilia bicolor, Reeve. Ibid., f. 31, ... 268
66. Mangilia pessulata, Reeve. Ibid., f. 38, . . . 260
67. Mangilia Hornbeckii, Reeve. Ibid., f. 47, . . . 248
68. Mangilia Reevei, Tryon (= crassilabrum, Reeve). Ibid., f. 36, ... 265
69. Mangilia lamellata, Reeve. Ibid., f. 12, . . . 265
70. Mangilia tenebrosa, Reeve. Ibid., f. 26 *a*, . . . 260
71. Mangilia obesa, Reeve. Ibid., f. 14, ... 262
72. Mangilia maculata, Reeve. Ibid., f. 22 *a*, . . . 259
73. Mangilia capillacea, Reeve. Ibid., f. 10, . . . 263
74. Mangilia fasciata, Gray. Ibid., f. 52, ... 269
75. Daphnella saturata, Reeve. Ibid., f. 213, . . . 303
76. Clathurella Cumingii, Powis. Ibid., f. 110 *a*, . . 283

Digitized by Google

FIGURE. PAGE.
77. Daphnella aureola, Reeve. Ibid., f. 212, . . . 302
78. Daphnella flammea, Hinds. Ibid., f. 210, . . . 302
79. Mangilia coniformis, Gray. Ibid., f. 67, . . . 264
80. Daphnella delicata, Reeve. Ibid., f. 310, . . . 301
81. Daphnella pluricarinata, Reeve. Ibid., f. 288, . . 304
82. Daphnella hyalina, Reeve. Ibid., f. 280, . . . 301
83. Clathurella fenestrata, Reeve. Ibid., f. 319, . . 283
84. Daphnella Ticaonica, Reeve. Ibid., f. 270, . . . 304
85. Daphnella axis, Reeve. Ibid., f. 311, ... 304
86. Daphnella hyalina, Reeve. Ibid., f. 269, . . . 301
87. Daphnella ægrota, Reeve. Ibid., f. 276, . . . 305
88. Daphnella ornata, Hinds. Ibid., f. 209, . . . 302
89. Daphnella patula, Reeve (= Lymneiformis). Ibid., f. 215, ... 300
90. Daphnella fragilis, Reeve (= Lymneiformis, var.). Ibid., f. 179, ... 300
91. Clathurella lactea, Reeve (= tricarinata, Rve.). Ibid., f. 123 *a*, ... 289
92. Daphnella Boholensis, Reeve. Ibid., f. 112 *a*, . . 301
93. Daphnella Lymnæformis, Kiener. Ibid., f. 325, . . 300
94. Daphnella crebriplicata, Reeve. Ibid., f. 313, . . 305
95. Daphnella Daphnelloides, Reeve (= marmorata, Hinds). Ibid., f. 206, ... 302
96. Daphnella casta, Hinds. Ibid., f. 336, ... 300
97. Daphnella olyra, Reeve. Ibid., f. 207, ... 306
98. Daphnella inquinata, Reeve. Ibid., f. 283, . . . 304

Plate 27.

1. Daphnella tessellata, Garrett. Proc. Philad. Acad., t. 3, f. 61, 1873, ... 303
2. Daphnella millegrana, Garrett. Ibid., t. 3, f. 59, . . 303
3. Lachesis pellis-phocæ, Reeve. Reeve, Conch. Icon., f. 263, ... 225
4. Lachesis multiplicata, Forbes (= minima). Reeve, Icon., f. 364, ... 224
5. Daphnella varicosa, Souverbie. Jour. de Conch., 1874, t. 7, f. 3, ... 305
6. Pleurotoma clavulus, Sowb. (= Columbella, Manual, v. 184). Reeve, Conch. Icon., f. 106.
7. Mangilia Goodalli, Gray. Ibid., f. 58, ... 260
8, 9. Clathurella Rissoides, Reeve. Ibid., f. 111 *a*, *b*, . 281
10. Mangilia solida, Reeve. Ibid., f. 64, ... 274
11. Mangilia marmorosa, Reeve. Ibid., f. 54, . . . 272
12. Mangilia Celebensis, Hinds. Ibid., f. 49, . . . 260
13. Mangilia nana, Reeve (= cincta, Reeve). Ibid., f. 71, . 259
14. Mangilia triticea, Kiener. Ibid., f. 128, . . . 268

Digitized by Google

FIGURE. PAGE.
15. Daphnella fusiformis, Garrett. Proc. Philad. Acad., t. 3, f. 58, 1873, ... 303
16. Daphnella curta, Pease. Am. Jour. Conch., iii, t. 15, f. 22, ... 304
17. Mangilia cinnamomea, Hinds. Reeve, Conch. Icon., f. 39, ... 266
18. Bela Grœnlandica, Reeve (= B bicarinata, Couth.). Ibid., f. 343, ... 214
19. Mangilia coronata, Hinds,. Ibid., f. 51, . . . 260
20. Bela viridula, Moll. (= Col. Holbolii, Beck). Ibid., f. 306, ... 223
21. Bela scalaris, Vahl (= decussata). Ibid., f. 277, . 217
22. Bela turricula, Montg. Ibid., f. 162, ... 219
23. Daphnella dormitor, Sowb. Sowb., Thes. Conch., i, t. 40, f, 173, ... 318
24. Mangilia digitalis, Reeve. Conch. Icon., f. 70, . . 268
25. Bela leucostoma, Reeve (= decussata). Ibid., f. 278, 217
26. Bela livida, Möll. (= Bela bicarinata, Couth.). Ibid., f. 316, ... 214
27. Bela Mölleri, Reeve (= concinnula, Verrill). Ibid., f. 324, ... 220
28. Bela Lyciaca, Forbes. Ibid., f. 160, ... 221
29. Bela decussata, Macg. (= Trevelyana). Ibid., f. 159, 221
30. Bela Vahlii, Möll. (= pyramidalis). Ibid., f. 332, . 215
31. Bela rugulata, Möll. (= bicarinata). Ibid., f. 345, . 214

PLATE 28.

32. Bela bicarinata, Couth. Sars, Moll. Norv., t. 16, f. 12, 214
33. Bela violacea, Mighels (= bicarinata). Ibid., t. 17, f. 2, 214
34. Bela violacea, var. levior, Sars (= bicarinata). Ibid., t. 17, f. 3, ... 214
35, 36. Bela tenuicostata, Sars (= decussata). Ibid., t. 17, f. 1 *b*, *a*, ... 217
37. Bela harpularia, var. rosea, Sars (= turricula). Ibid., t. 23, f. 10, ... 219
38. Bela declivis, Lovén. Ibid., t. 16, f. 10, . . . 218
39. Bela scalaroides, Sars (= turricula). Ibid., t. 23, f. 7, 219
40. Bela pyramidalis, Strom. Ibid., t. 16, f. 3, . . . 215
41. Bela nobilis, Möller (= turricula). Ibid., t. 16, f. 19, . 219
42. Bela nobilis, juv., Sars (= Americana). Ibid., t. 16, f. 20, ... 220
43. Mangilia imperfectum, Folin. Meleagrinicoles, t. 5, f. 17, ... 250
44. Bela assimilis, Sars (= turricula). Sars, Moll. Norv., t. 23, f. 8, ... 219
45. Bela harpularia, Sars (= turricula). Ibid., t. 16, f. 17, 219

Digitized by Google

FIGURE. PAGE.

46. Bela angulosa, Sars (= cancellata, Moll.). Ibid., t. 16, f. 16, ... 218
47. Bela pyramidalis, var. semiplicata. Ibid., t. 16, f. 4, . . 215
48. Bela cinerea, Möller. Ibid., t. 23, f. 4, ... 218
49. Bela cancellata, Sars (= Sarsii, Verrill). Ibid., t. 23, f. 3, ... 218
50. Bela obliqua, Sars. Ibid., t. 16, f. 6, ... 219

PLATE 29.

51. Bela harpularia, Couth. Trans. Conn. Acad., v, t. 43, f. 14, ... 219
52. Bela expansa, Sars. Sars, Moll. Norv., t. 17, f. 7, . 216
53. Bela elegans, Möll. (= cancellata). Ibid., t. 16, f. 15, 218
54. Bela concinnula Verrill. Trans. Conn. Acad., v, t. 43, f. 15, ... 220
55. Bela decussata, Couth. Ibid., t. 43, f. 13, . . . 217
56. Bela simplex, Middendorff (= Schantarica). Reise, t. 12, f. 16, ... 214
57. Bela mitrula, Lovén (= turricula). Sars, Moll. Norv., t. 23, f. 9, ... 219
58. Pleurotomella Agassizi, Verrill and Smith. Trans. Conn. Acad., v, t. 57, f. 3, ... 316
59. Pleurotomella Packardi, Verrill. Ibid., t. 43, f. 9, . 316
60. Bela pygmæa, Verrill (= decussata). Ibid., t. 57, f. 8, 217
61. Bela conoidea, Sars. Moll. Norv., t. 16, f. 14, . . 221
62. Pleurotomella Pandionis, Verrill. Trans. Conn. Acad., v, t. 57, f. 4, ... 316
63. Taranis pulchella, Verrill. Trans. Conn. Acad., v, t. 57, f. 17, ... 315
64. Bela Pingeli, Möller. Ibid., t. 43, f. 16, . . . 217
65. Bela incisula, Verrill (= decussata). Ibid., t. 43, f. 12, 217
66. Taranis Mörchi, Malm. Sars, Moll. Norv., t. 17, f. 8, . 315
67. Bela cancellata, Mighels. Trans. Conn. Acad., v, t. 43, f. 10, ... 218
68. Bela Gouldii, Verrill (= Americana, var.). Ibid., t. 57, f. 6, ... 220
69. Bela hebes, Verrill (= decussata). Ibid., t. 57, f. 7, . 217

PLATE 30.

70. Mangilia Godeffroyi, Folin. Meleagrinicoles, t. 5, f. 12, 250
71. Clathurella nodosa, Folin. Ibid., t. 5, f. 15, . . 299
72. Mangilia leucolabratum, Folin. Ibid., t. 5, f. 13, . 250
73. Clathurella pustulosa, Folin. Ibid., t. 5, f. 14, . . 298
74. Mangilia Carpenteri, Folin. Ibid., t. 5, f. 11, . . 250
75. Mangilia hirsutum, Folin. Ibid., t. 5, f. 16, . . 270

Digitized by Google

FIGURE. PAGE.
76. Mangilia amabilis, Nevill. Jour. Asiat. Soc., xliii, t. 1, f. 11, ... 273
77. Clavatula sacerdos, Reeve. Jahr. Mal. Gesell., x, t. 3, f. 10, ... 229
78. Drillia umbilicata, Gray. Ibid., t. 3, f. 5, . . . 179
79. Drillia callosa, Val. Ibid., t. 3, f. 3, ... 192
80. Drillia tripter, Maltzan. Ibid., t. 3, f. 1, . . . 208
81. Drillia consociata, Smith. Ibid., t. 3, f. 4, . . . 192
82. Surcula pluteata, Reeve. Ibid., t. 3, f. 7, . . . 240
83. Clavatula ferruginea, Maltzan (= rubrifasciata, Rve.). Ibid., t. 3, f. 8, ... 229
84. Clavatula Colini, Maltzan. Ibid., t. 3, f. 9, . . . 230
85. Drillia lævisulcata, Maltzan (= coccinata, Reeve). Ibid., t. 3, f. 6, ... 188
86. Daphnella mediofasciata, Maltzan (= nebula, var.). Ibid., t. 3, f. 12, ... 307
87. Mangilia subclathrata, Maltzan. Ibid., t. 3, f. 13, . 245
88. Mangila Struckii, Maltzan. Ibid., t. 3, f. 14, . . 245
89. Daphnella Senegalensis, Maltzan. Ibid., t. 3, f. 15, . 310
90. Drillia ballista, Maltzan. Ibid., t. 3, f. 2, . . . 208
91. Mangilia Goreensis, Maltzan. Ibid., t. 3, f. 11, . . 246
92. Bela pleurotomaria, Couth. Gould, Invert. Mass., f. 625, ... 215
93. Bela turricula. Montg. Ibid., f. 620, ... 219
94. Bela Kobelti, Verk. (= decussata). Jahrb. Mal. Gesell., iii, t. 4, f. 5, ... 217
95. Lachesis Turqueti, Velain. Arch. Zool. Exper., vi, t. 2, f. 18, ... 226
96. Bela lævigata, Dall. (= Schantarica). Am. Jour. Conch., vii, t. 16, f. 7, ... 214
97. Bela gigas, Beck (= Schantarica). Jahrb. Mal. Gesell., ii, t. 8, f. 6? 214
98. Clathurella plicata, Adams. Gould, Invert. Mass., f. 619, ... 277

Plate 31.

1. Halia Priamus, Meuschen. Reeve, Icon., xiv, fig. 1 *d*, . 318
2. Pusionella aculeiformis, Lam. Kiener, Iconog. Fusus, t. 29, f. 2, ... 234
3. Pusionella Catelini, Petit (= aculeiformis). Jour. de Conch., ii, t. 1, f. 2, ... 234
4. Pusionella buccinatus, Lam (= vulpina, Born.). Kiener, Iconog. Fusus, t. 8, f. 2, ... 234
5. Pusionella Recluziana, Petit (= vulpina). Jour. de Conch., ii, t. 1, f. 1, ... 234

Digitized by Google

FIGURE. PAGE.

6. Pusionella albocincta, Petit (= vulpina). Jour. de Conch., ii, t. 1, f. 12, ... 234
7. Pusionella Milleti, Petit. Jour de Conch., ii, t. 1, f. 6, . 235
8. Pusionella subgranulata, Petit (= Milleti). Jour. de Conch., ii, t. 2, f. 1, ... 235
9. Pusionella valida, Dunker. Novit. Conch., t. 10, f. 1, . 234
10. Pusionella candida, Phil. (? = valida). Abbild. iii, Fusus, t. 5, f. 7, ... 234
11. Pusionella rapulum, Reeve. Reeve, Conch. Icon. Buccinum, f. 83, ... 235
12. Pusionella Wallaysii, Petit (= rapulum). Jour. de Conch., ii, t. 1, f. 7, ... 235
13, 14. Pusionella nifat, Brug. Kiener, Fusus, t. 23, f. 1; t. 24, f. 2, ... 235

PLATE 32.

15. Perrona taxus, Chemn. Kiener, Iconog., t. 10, f. 1, . 231
16. Pleurotoma difficilis, Smith. Zool. Proc., t. 19, f. 8, 1879, ... 173
17. Bela fidicula, Gould. Moll. Wilkes Exped., f. 284, . 222
18. Bela subluta, Gould. Ibid., f. 286, ... 222
19. Drillia tiarella, Kiener (= nigerrima, Sowb.). Iconog., t. 3, f. 2, ... 196
20. Clathurella granulosissima, Tenison-Woods. Specimen, ... 282
21. Lachesis minima, Mont. Jour. de Conch., t. 5, f. 7, 1868, ... 224
22. Lachesis lineolata, Tiberi (= candidissima). Ibid., t. 5, f. 5, 1868, ... 225
23. Lachesis candidissima, Phil. Ibid., t. 5, f. 4, 1868, . 225
24. Lachesis mamillata, Risso (= minima). Ibid., t. 5, f. 6, 1868, ... 224
25. Lachesis Folinæ, Phil. Phil., Moll. Sicil., ii, t. 27, f. 10, ... 225
26. Lachesis meridionalis, Smith. Zool. Proc., 1881, t. 4, f. 3, ... 226
27. Clathurella sculptilior, Tenison-Woods. Specimen, . 282
28. Daphnella nana, Loven. Forbes and Hanley, Brit. Moll., t. 112, f. 8, ... 315
29. Daphnella delicatula, Tenison-Woods. Specimen, . 302
30. Clathurella volutella, Kiener (= inflata). Kiener, Iconog., t. 25, f. 1, ... 274
31. Daphnella teres, Forbes (= anceps, Eichw.). Forbes and Hanley, t. 113, f. 2, ... 313
32. Mangilia albida, Desh. Expl. Morée, t. 19, f. 22, . 245

Digitized by Google

FIGURE. PAGE.
33. Mangilia Sandriana, Brusina (= Paciniana). Jahrb. Mal. Gesell., i, t. 10, f. 5, ... 243
34. Clathurella Cordieri, Payr. Payr., Moll. Corse., t. 7, f. 11, ... 275
35. Bela rufa, Mont. Forbes and Hanley, t. 112, f. 3, . 224
36. Surcula astricta, Reeve. Weinkauff, Küster, t. 9, f. 4, 240
37. Mangilia coarctata, Forbes and Hanley (= costata). Forbes and Hanley, t. 114 *a*, f. 5, ... 244
38 Drillia crenularis, Lam. Weinkauff, Küster, t. 10, f. 6, 178
39. Clavatula patruelis, Smith. Zool. Proc., t. 19, f. 10, 1879, ... 230
40. Clathurella felina, Hinds. Voy. Sulphur, t. 7, f. 4, . 292
41. Drillia acuminata, Migh. Martens, Don. Bism., t. 1, f. 1, ... 190
42. Drillia inermis, Hinds. Voy. Sulphur, t. 5, f. 7, . . 182
43. Drillia duplicata, Weinkauff (= maura). Küster, t. 10, f. 9, ... 181
44. Drillia lanceolata, Reeve. Martens, Mittheil., t. 8, f. 4 *a*, 181
45, 46. Drillia aterrima, Sowb. Weinkauff, Küster, t. 19, f. 1; t. 17, f. 2, ... 194
47. Mangilia cærulans, Apellius (= Bertrandi). Bull. Mal. Ital., ii, t. 4, f. 1, ... 244
48. Drillia Beckii, Weink. (= unizonalis). Weinkauff, Küster, t. 13, f. 4, ... 186
49. Mangilia melanostoma, Garrett (= angicostata). Proc. Philad. Acad., t. 2, f. 40, 1873, ... 252
50. Mangilia pygmæa, Dunker. Moll. Japon., t. 1, f. 8, . 257

Plate 33.

51. Halia Priamus, Meusch. Jour. de Conch., 2d ser., iii, t. 5, f. 3, ... 162
52. Bela rugulata, Möll. Sars, Moll. Norv., t. 8, f. 13 *a*; *p*, proboscis; *a*, intestine; *r*, unciniferous sac, containing the radula; *v*, poison gland; *b*, its excretory canal, ... 151
53. Spirotropis carinata, Phil. Sars, Moll. Norv., t. 9, f. 11, 155
54. Pleurotoma babylonia, Linn. Troschel, Gebiss, ii, t. 3, f. 12, ... 154
55. Bela rugulata, Möll. Sars, Moll. Norv., t. 8, f. 13 *c*, . 156
56, 57. Clathurella Leufroyi, Mich. Ibid., t. 8, f. 2 *b*, *a*, . 159
58. Clionella Buccinoides, Lam. Stimson, Am. Jour. Conch., i, t. 9, f. 13, ... 158
59. Surcula nodifera, Lam. Troschel, Gebiss, ii, t. 3, f. 13, 158
60. Bela rugulata, Möll. (= turricula). Sars, Moll. Norv., t. 23, f. 6, ... 219

Digitized by Google

FIGURE. PAGE

61. Clathurella formosa, Jeffreys. Zool. Proc., t. 44, f. 9, 1883, ... 297
62. Mangilia Companoyi, B.D.D. Moll. Rouss., t. 15, f. 20, 245
63. Bela Novaja-Semljensis, Leche. Sven. Handl., xvi, t. 1, f. 15, ... 215
64. Bela Americana, Packard. Bost. Memoirs, i, t. 7, f. 11, 220
65. Bela Trevellyana, Turton. Forbes and Hanley, t. 112, f. 2, ... 221
66. Daphnella nebula, Montg., var. lævigata. Jeffreys, Brit. Conch., t. 91, f. 3, ... 307
67. Lachesis recondita, Brugn. (= vulpecula, Mts.). Brugnone, f. 15, ... 225
68. Clathurella rude, Phil. (= clathrata, Marcel). Phil., Moll. Sicil., i, t. 11, f. 16, ... 276
69. Bela impressa, Beck. Leche, Sven. Handl., xvi, t. 1, f. 16, ... 220
70. Bela Mörchi, Leche (= Schantarica). Ibid., t. 1, f. 18, 214
71. Mangilia bicinctula, Nevill (= Boakei). Jour. As. Soc. Beng., xl, t. 1, f. 15 *a*, ... 270
72. Bela Jenisensis, Leche (= pyramidalis). Leche, Sven. Handl., xvi, t. 1, f. 17, ... 215
73. Bela exigua, Jeffreys. Zool. Proc., t. 44, f. 10, 1883, . 216
74. Clathurella semiplicata, Bon. (= stria). Phil., Moll. Sicil., ii, t. 26, f. 18, ... 274

PLATE 34.

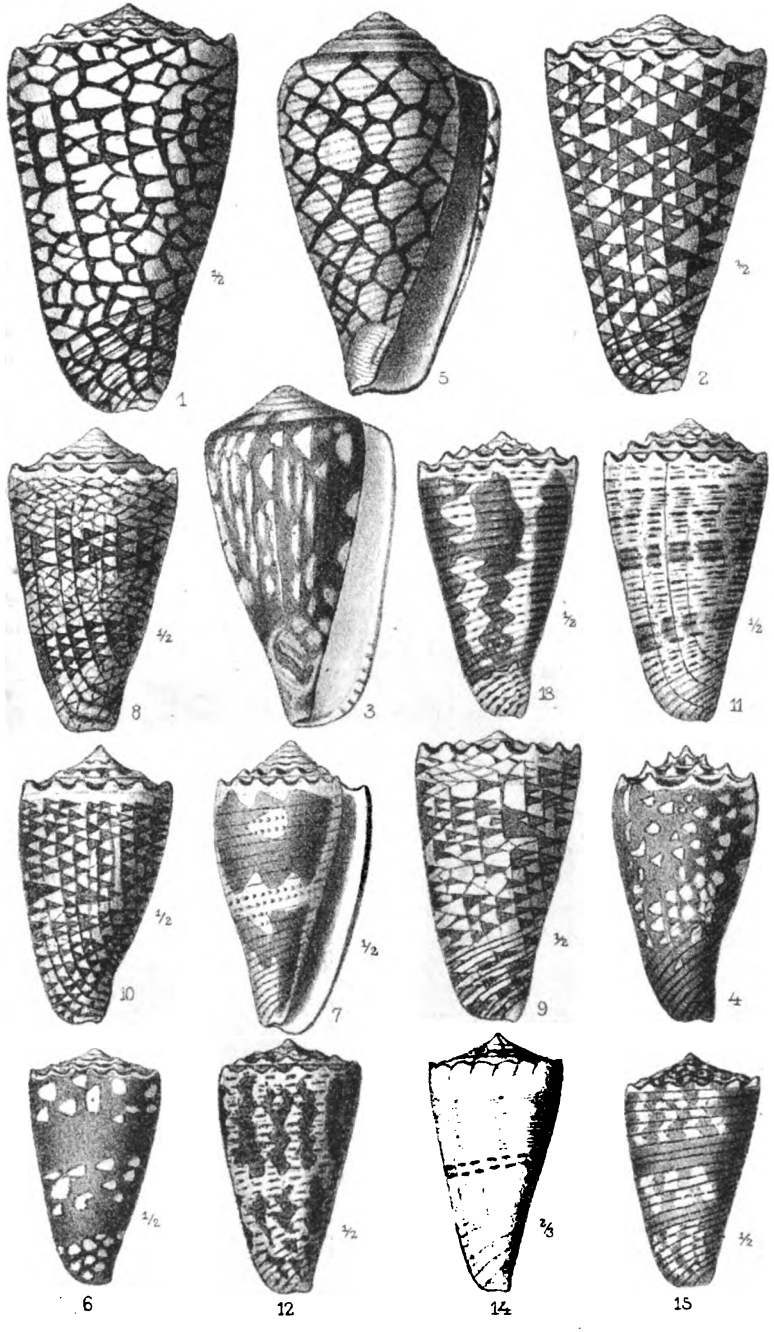
75. Bela Cunninghami, Smith (= subluta). Zool. Proc., t. 4, f. 1, 1881, ... 222
76. Bela Schantarica, Middendorff. Reise, t. 12, f. 18, . 214
77. Mangilia costata, Forbes and Hanley. Forbes and Hanley, t. 114 *a*, f. 4, ... 244
78. Lachesis Japonica, A. Ad. Zool. Proc., t. 20, f. 29, 1879, 226
79. Drillia ostrearum, Stearns. Specimen, . . . 197
80. Pleurotoma virginea, Val. Kiener, Iconog., t. 21, f. 2, 167
81. Bela rufa, Gould (= pyramidalis). Gould, Invert. Mass., 1st ed., f. 192, ... 215
82. Pleurotoma Philipineri, Tenison-Woods. Specimen, . 167
83. Daphnella subvitrea, Smith. Zool. Proc., t. 20, f. 43, 1879, ... 314
84. Mangilia stellata, Stearns. Specimen, . . . 246
85. Clathurella concinna, Scacchi. Cat., f. 18, . . . 277
86. Mangilia pyramis, Hinds. Reeve, Icon., f. 147, . . 253
87. Drillia castanea, Reeve. Weinkauff, Küster, t. 22, f. 4, 177
88. Mangilia unifasciata, Desh. Expl. Morée, t. 19, f. 34, 243
89. Drillia pygmæa, Dunker. Specimen, ... 206
90. Drillia Traillii, Hutton. Specimen, ... 206

Digitized by Google

FIGURE.		PAGE.
91.	Clathurella Sinclairi, Smith. Specimen,	283
92.	Zafra pupoidea, Ad. Zool. Proc., t. 3, f. 27, 1872,	314
93.	Drillia minuta, Tenison-Woods. Specimen,	210
94.	Borsonia crassicostata, Pease. Specimen,	227
95.	Daphnella fuscoligata, Dall. Specimen,	301
96.	Mangilia striosa, C. B. Ad. Specimen,	249
97.	Mangilia ordinaria, Smith. Specimen,	250
98.	Clathurella mutica, Hinds. Voy. Sulphur, t. 7, f. 10,	286
99.	Clathurella incrusta, Tenison-Woods (= Letourneuxiana). Specimen,	286
100.	Daphnella atrostyla, Dall (= cerina, Kurtz and Stimpson, var.). Specimen,	310
1.	Drillia thea, Dall. Specimen,	189
2.	Drillia leucocyma, Dall (= zebra, var.). Specimen,	197
3.	Surcula olivacea, Sowb. Weinkauff, Conch. Cab., t. 8, f. 2,	237
4.	Bela Aleutica, Dall. Specimen,	216
5.	Bela Alaskensis, Dall. Specimen,	216
6.	Drillia limonitella, Dall. Specimen,	320
7.	Pleurotoma Jeddoensis, Jouss. Bull. Soc. Zool. France, 1883,	319
8.	Drillia Bellardi, Jousseaume. Bull. Soc. Zool. France, 1883,	320
9.	Drillia Clevei, Jousseaume. Ibid.,	319
10.	Drillia makimonos, Jousseaume. Ibid.,	319
11.	Drillia Pouloensis, Jousseaume. Ibid.,	319
12.	Mitromorpha Floridana, Dall. Specimen,	317
13.	Conus Cailliaudi, Jay. Ann. N. Y. Lyc., iv, t. 10, f. 8,	319
14, 15.	Daphnella semisculpta, Nevill. Jour. Asiat. Soc., t. 8, f. 6, 7, 1875,	314

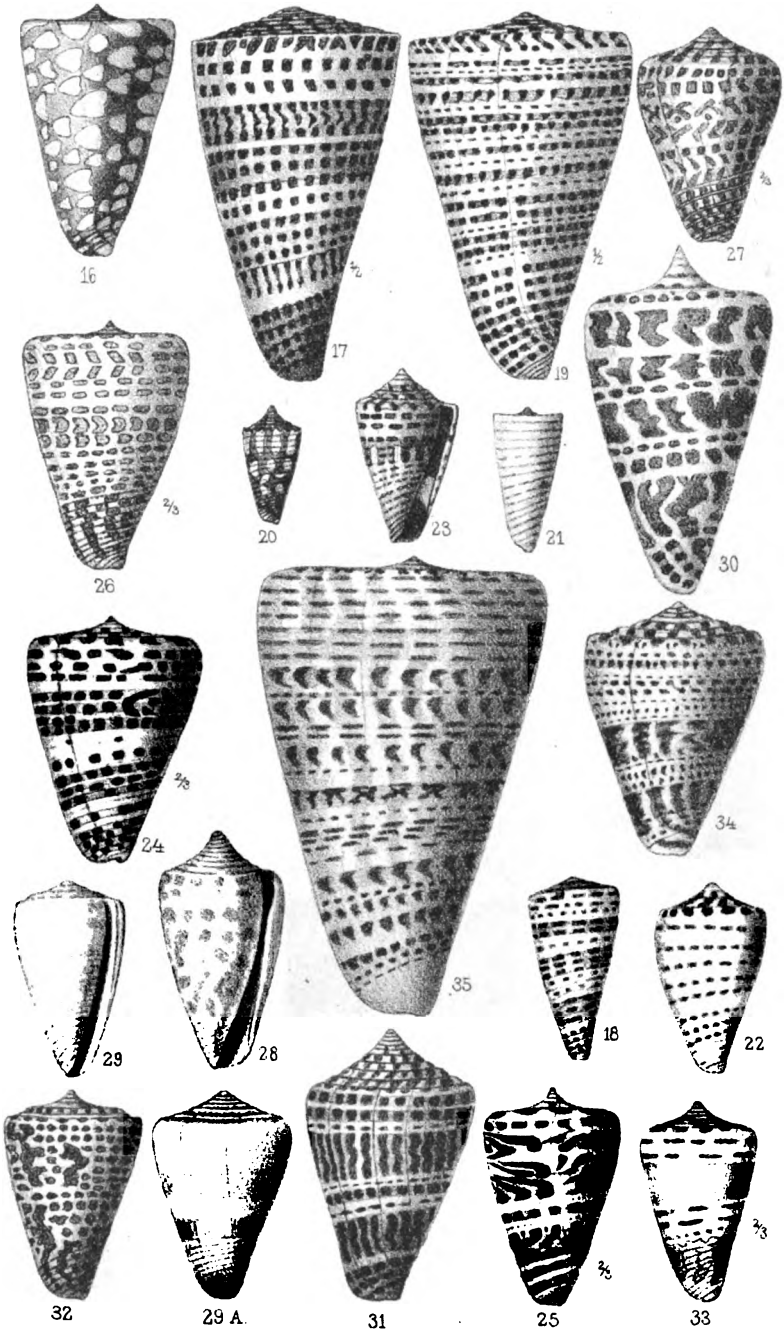
Digitized by Google

Digitized by Google



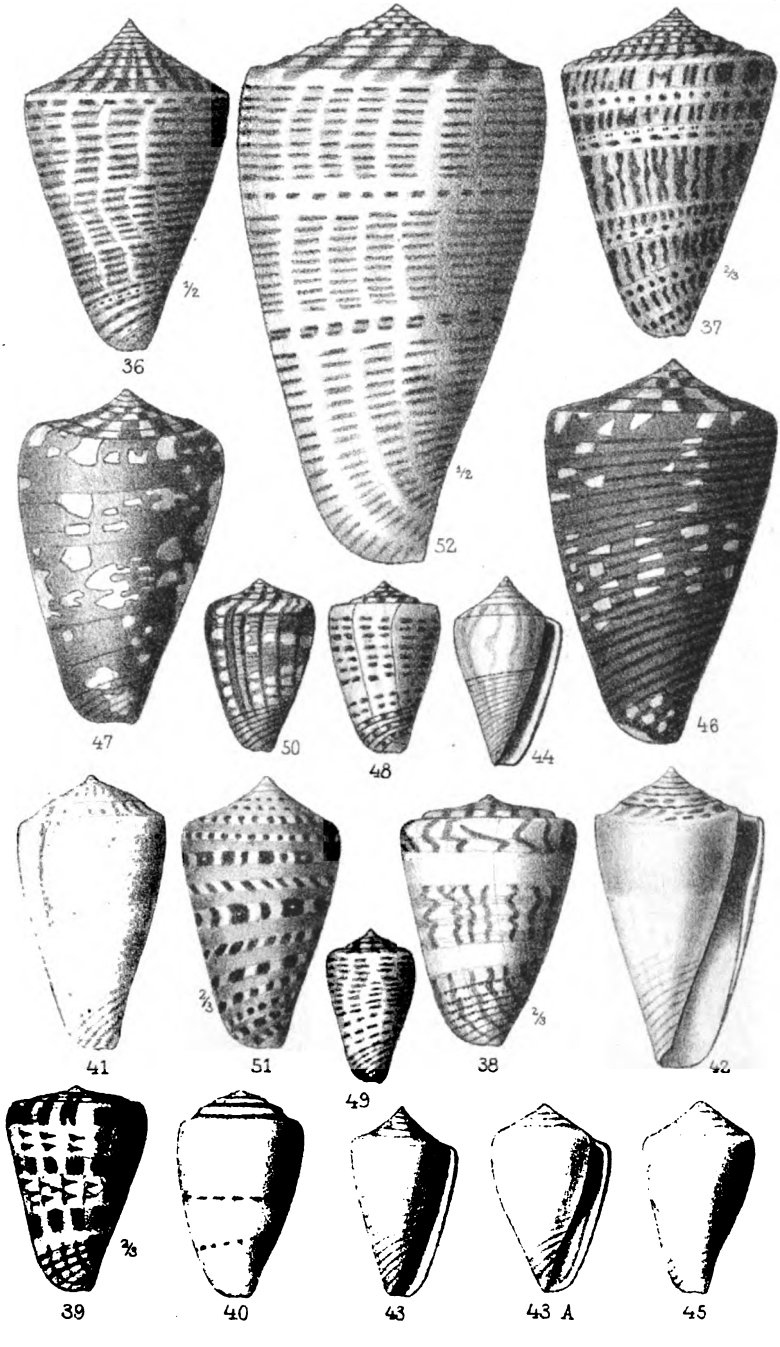
Digitized by Google

Digitized by Google



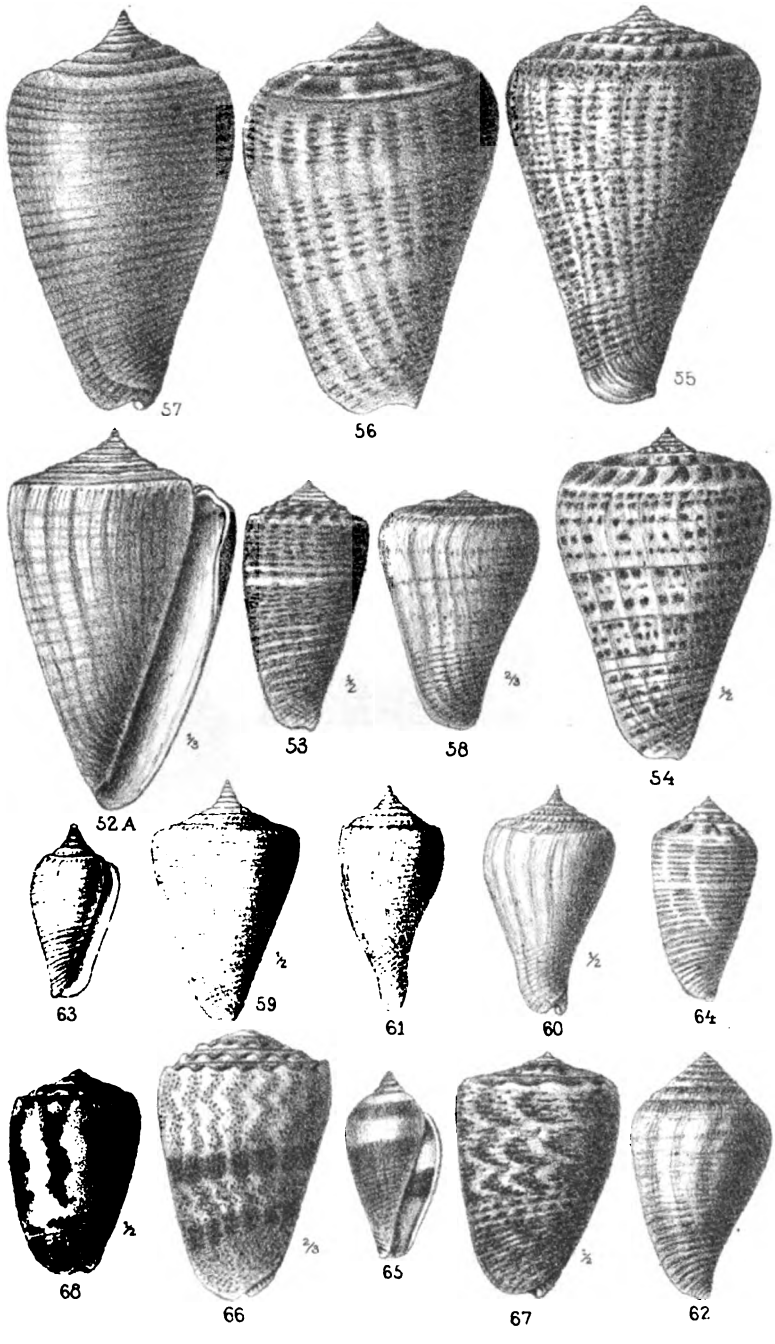
Digitized by Google

Digitized by Google



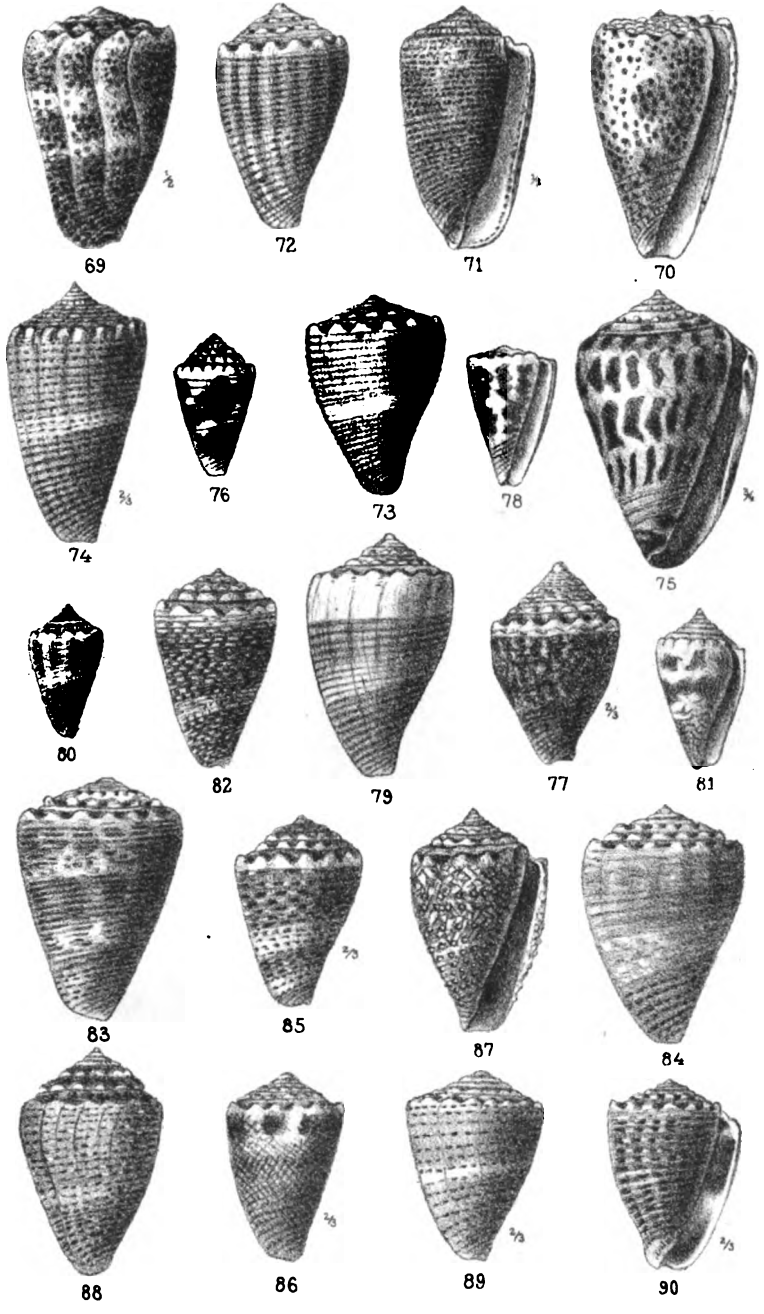
Digitized by Google

Digitized by Google



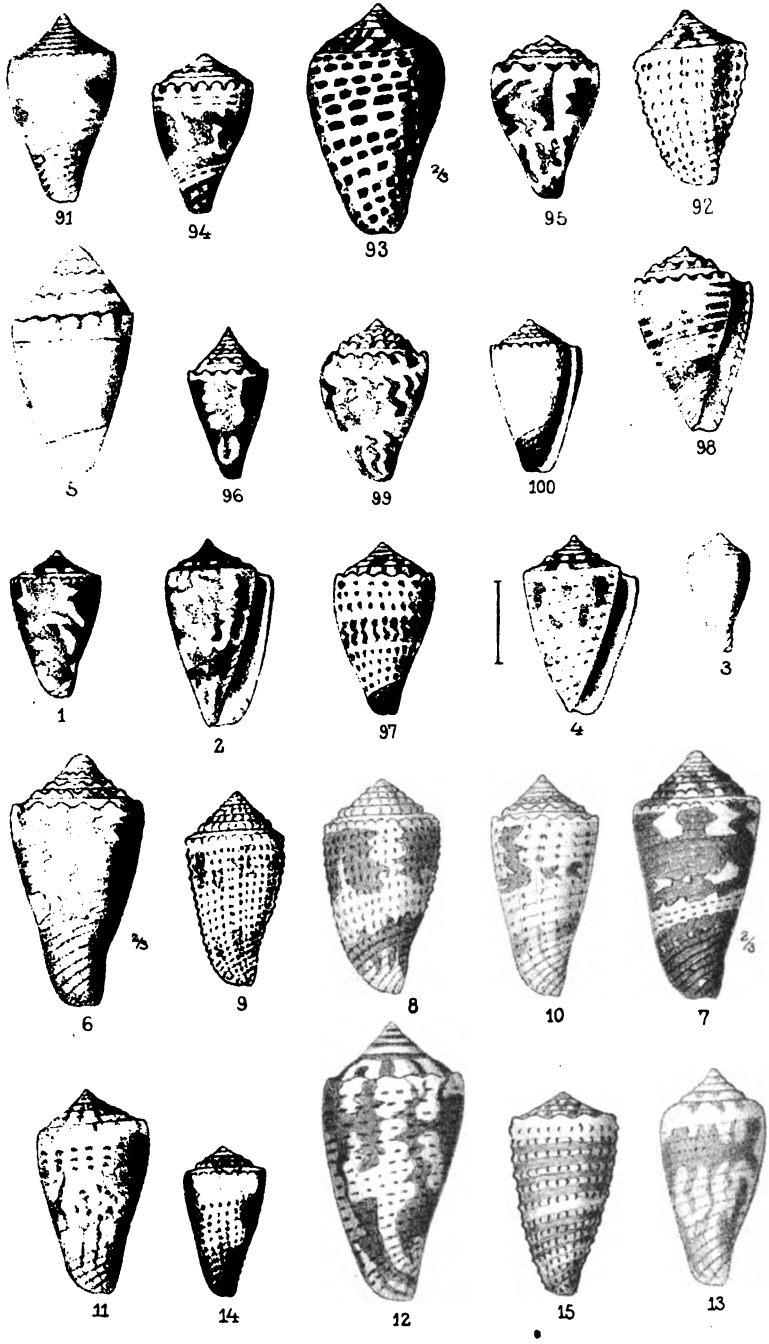
Digitized by Google

Digitized by Google



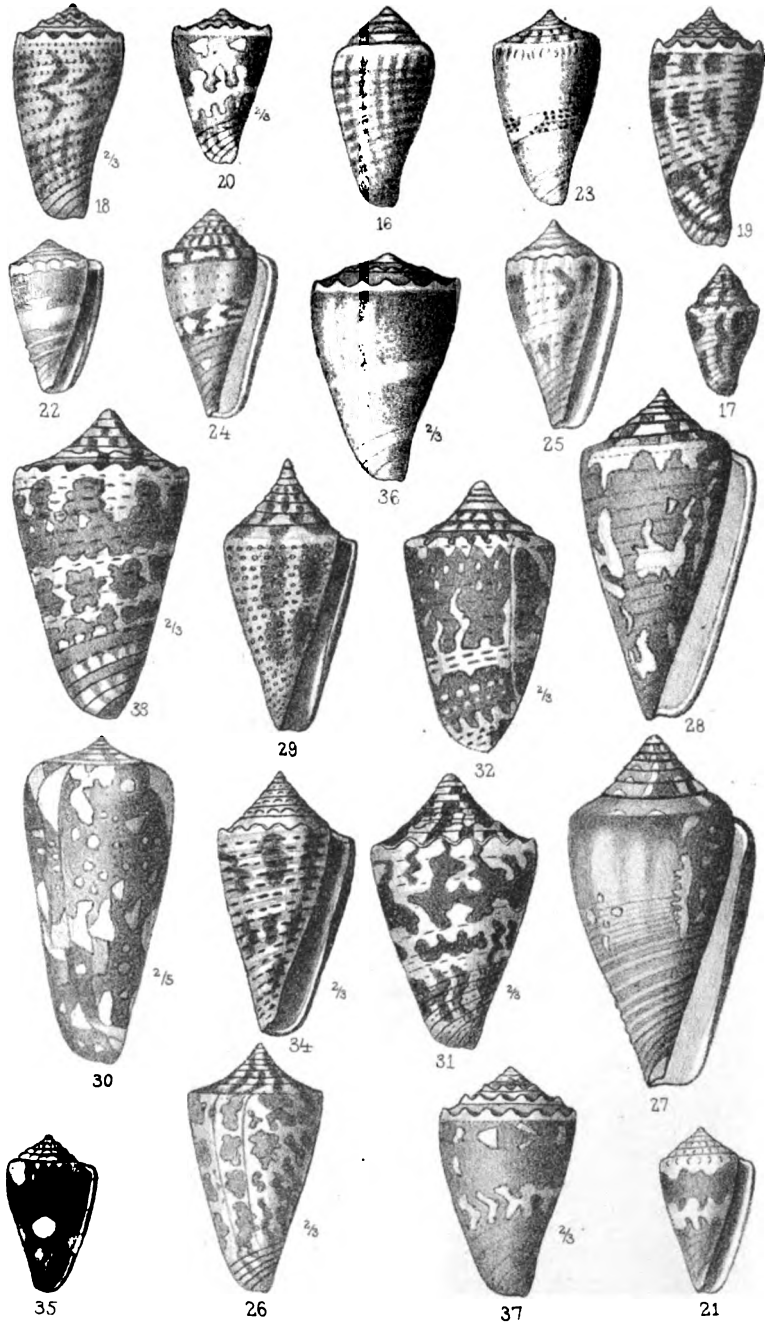
Digitized by Google

Digitized by Google



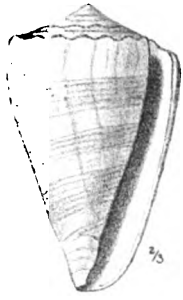
Digitized by Google

Digitized by Google

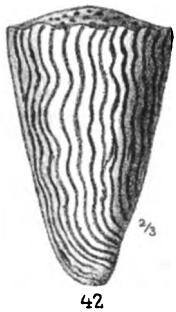


Digitized by Google

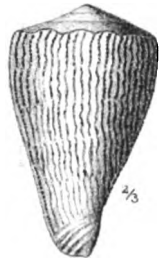
Digitized by Google



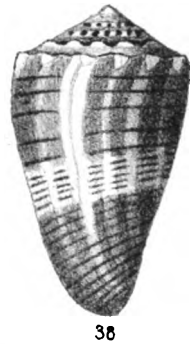
39



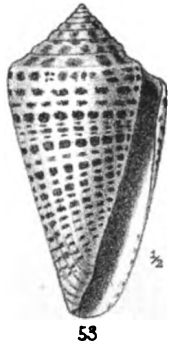
42



41

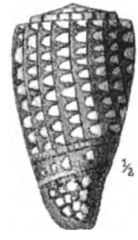

38

43

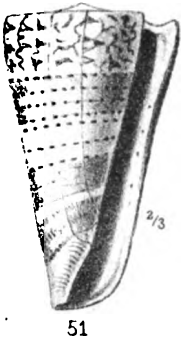


53

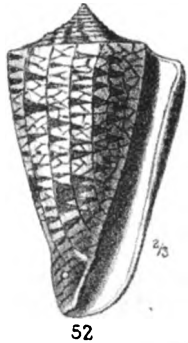
47



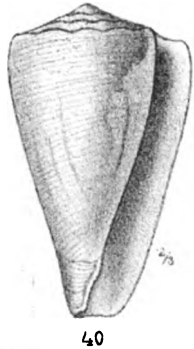
48



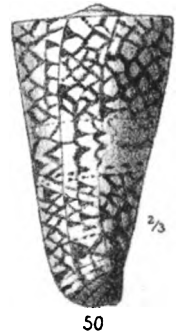
51



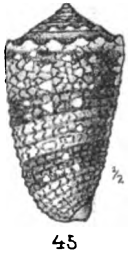
52



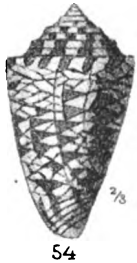
40



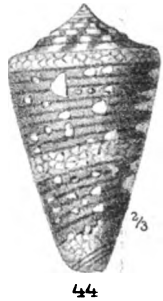
50



45

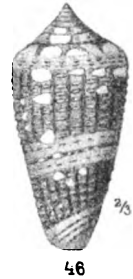


54



44

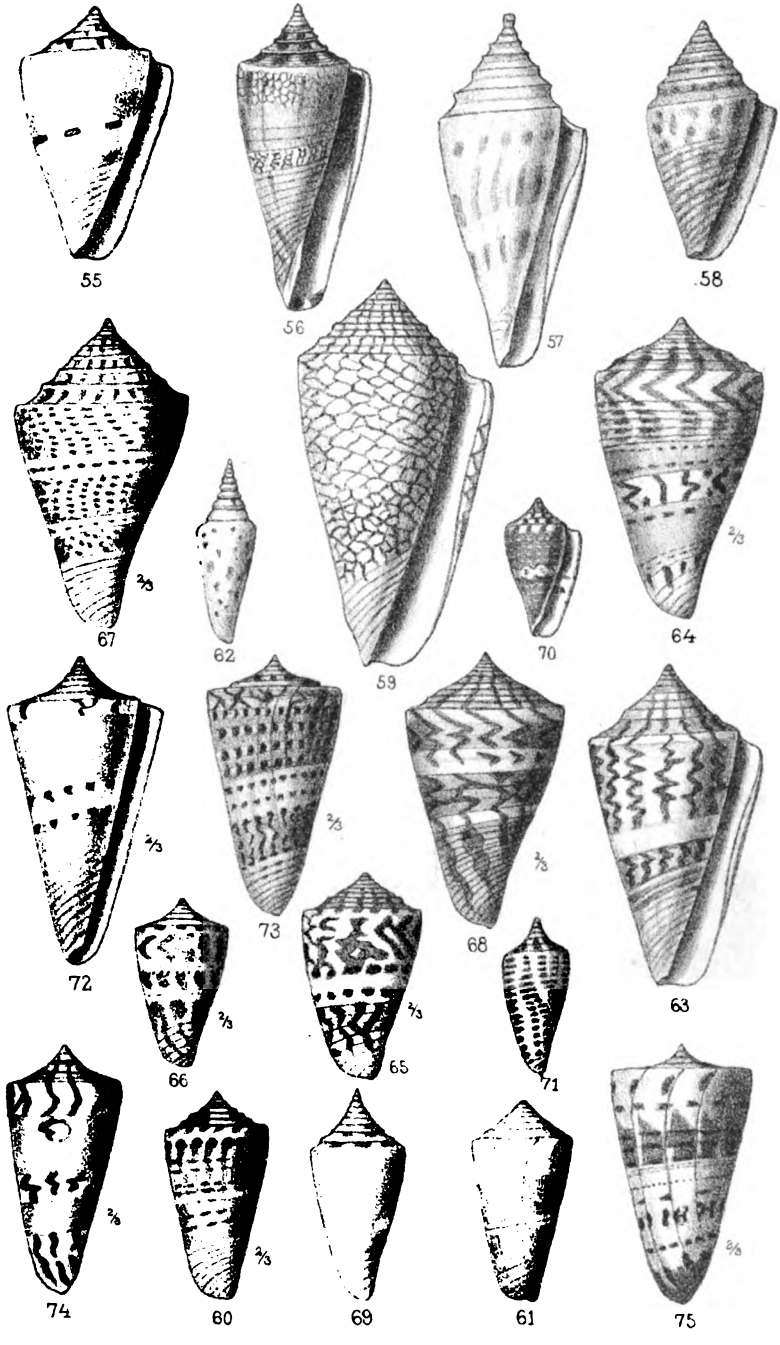
49



46

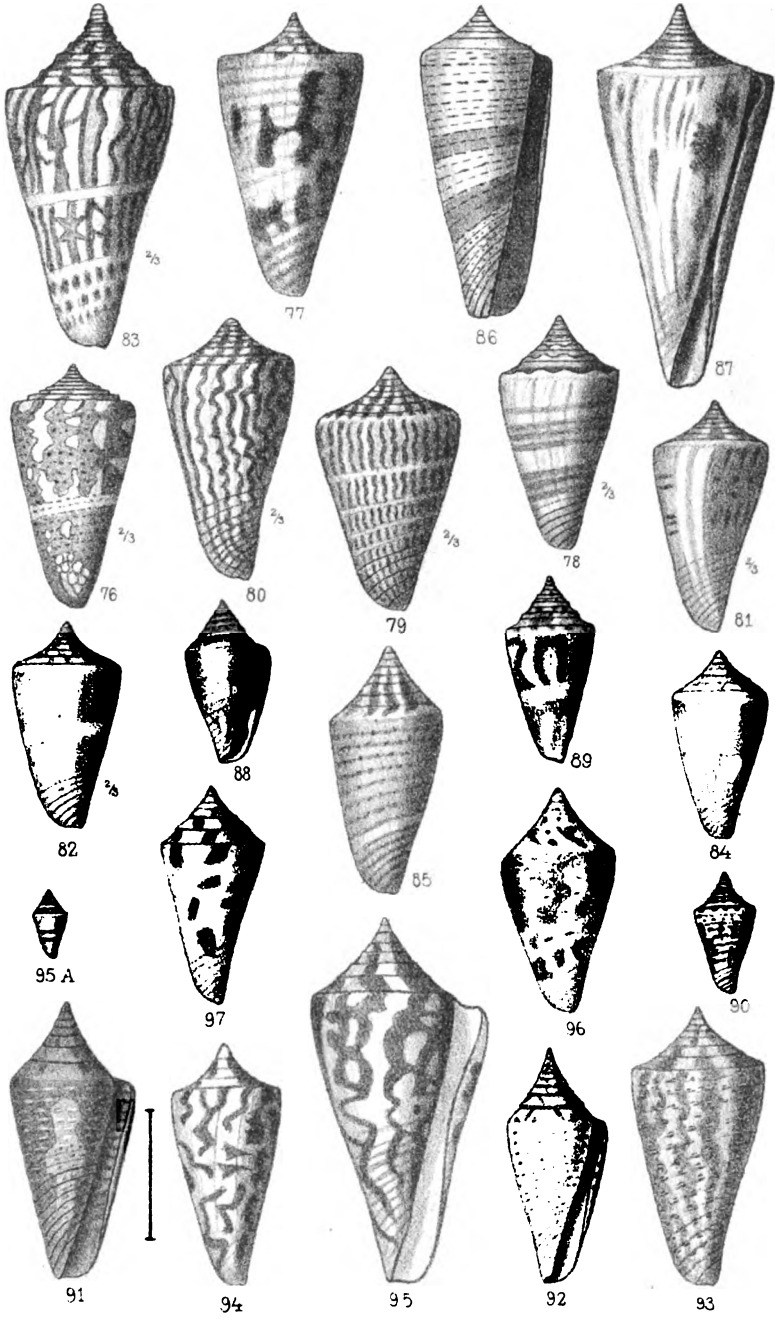
Digitized by Google

Digitized by Google



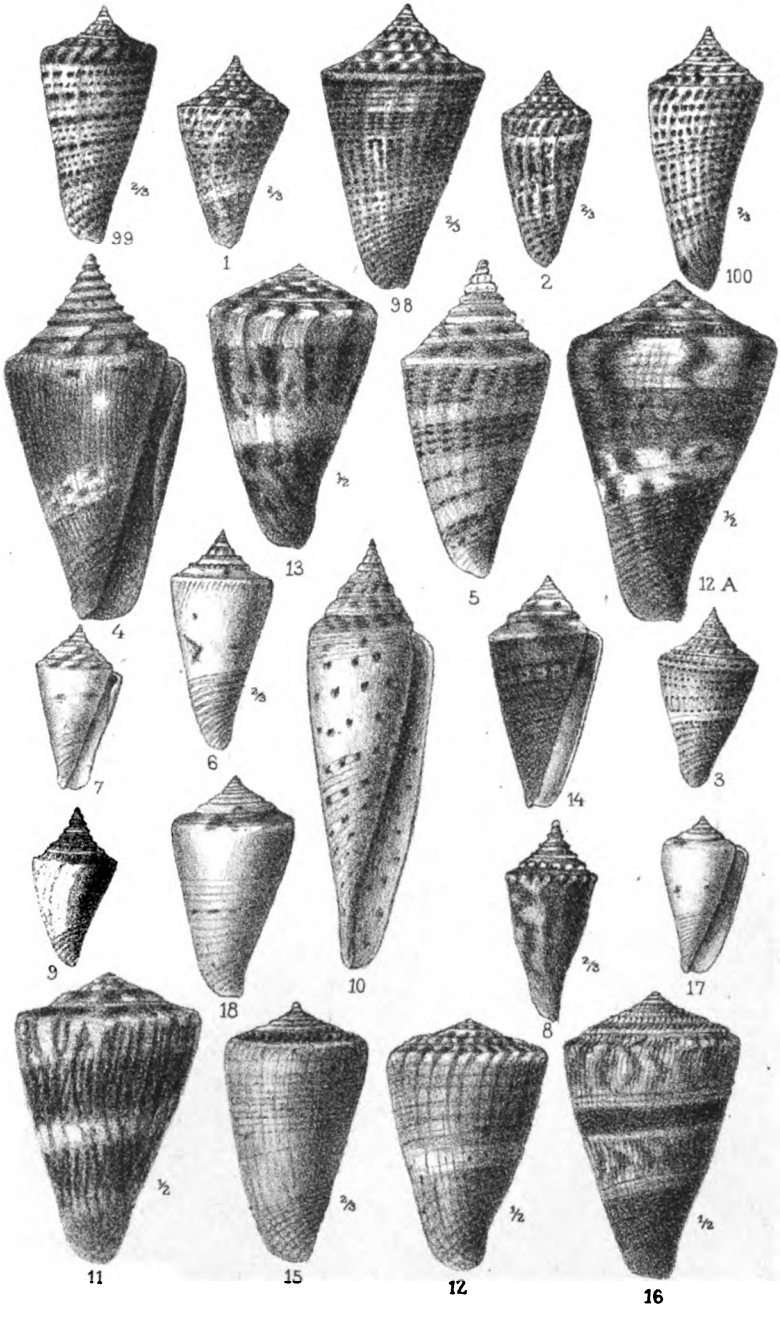
Digitized by Google

Digitized by Google



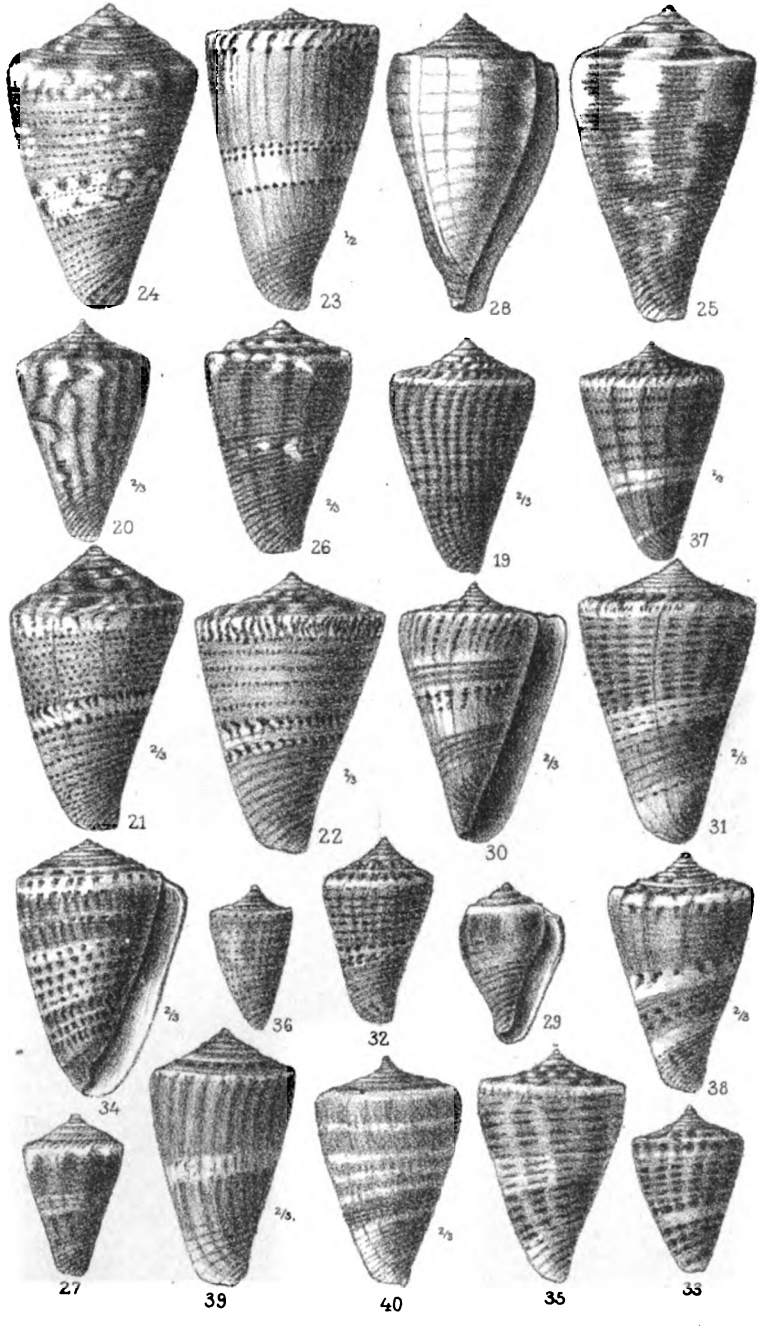
Digitized by Google

Digitized by Google



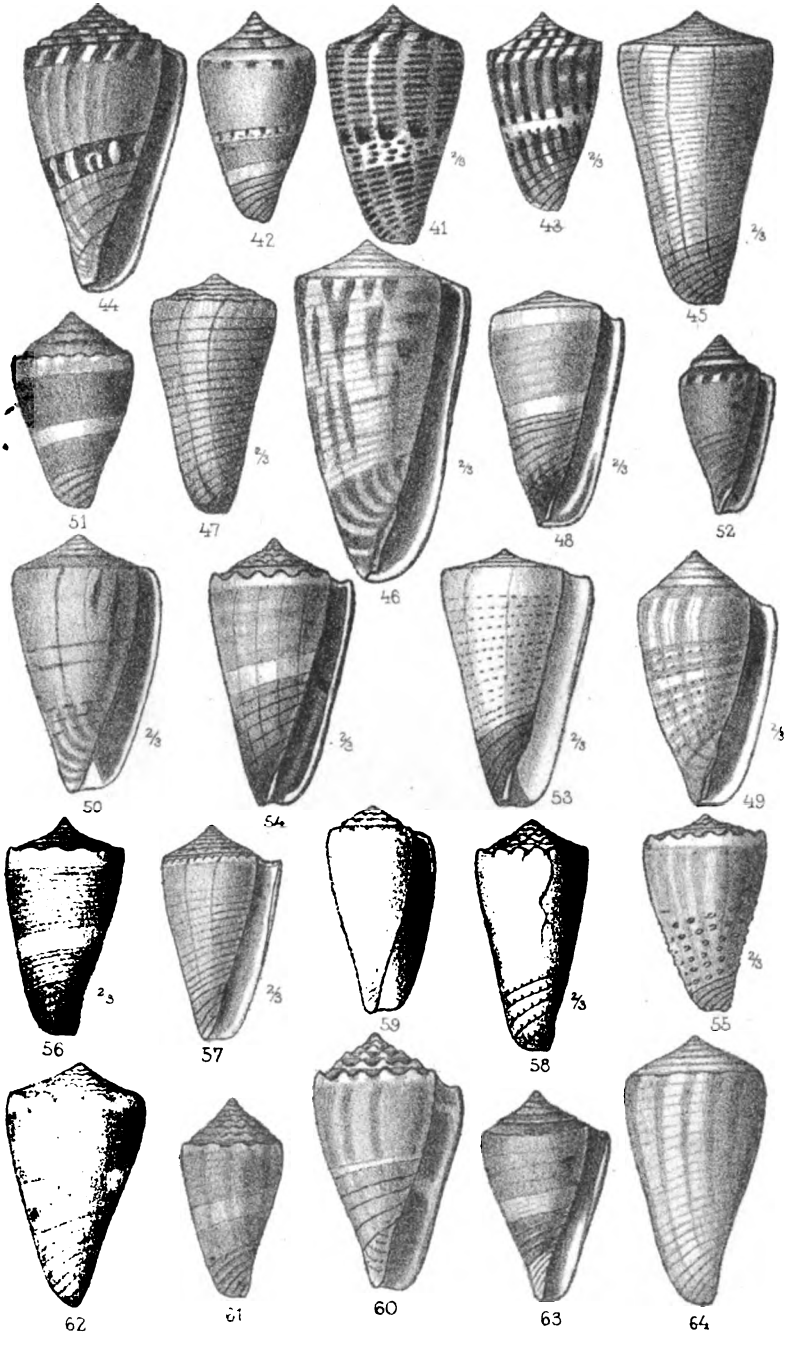
Digitized by Google

Digitized by Google



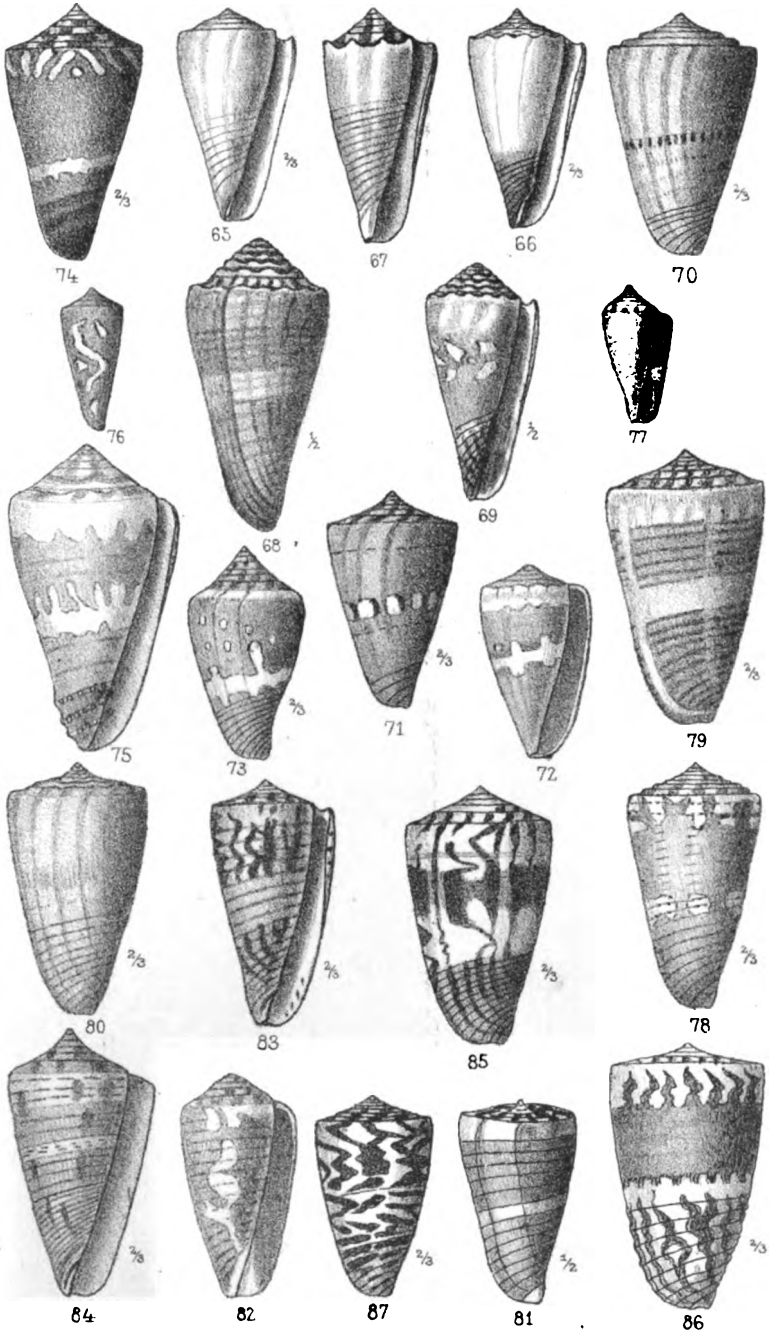
Digitized by Google

Digitized by Google



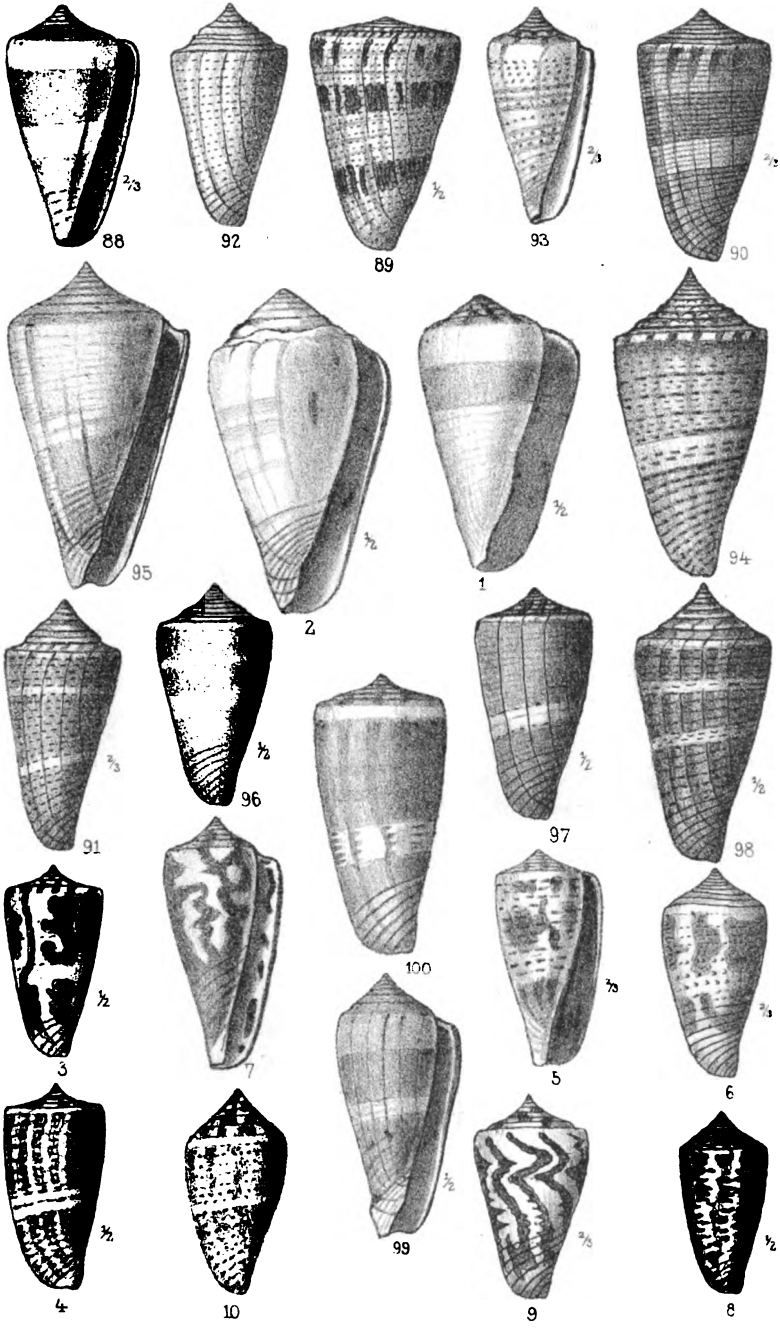
Digitized by Google

Digitized by Google



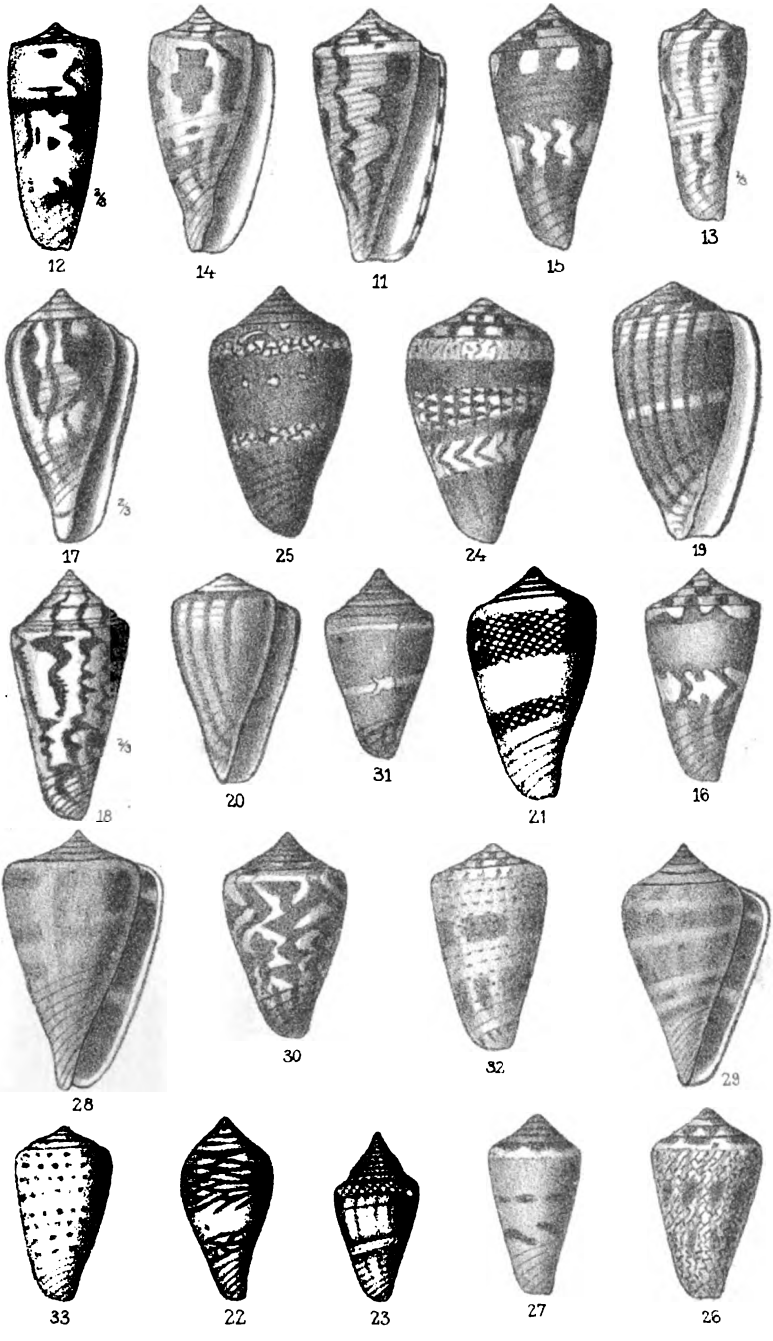
Digitized by Google

Digitized by Google



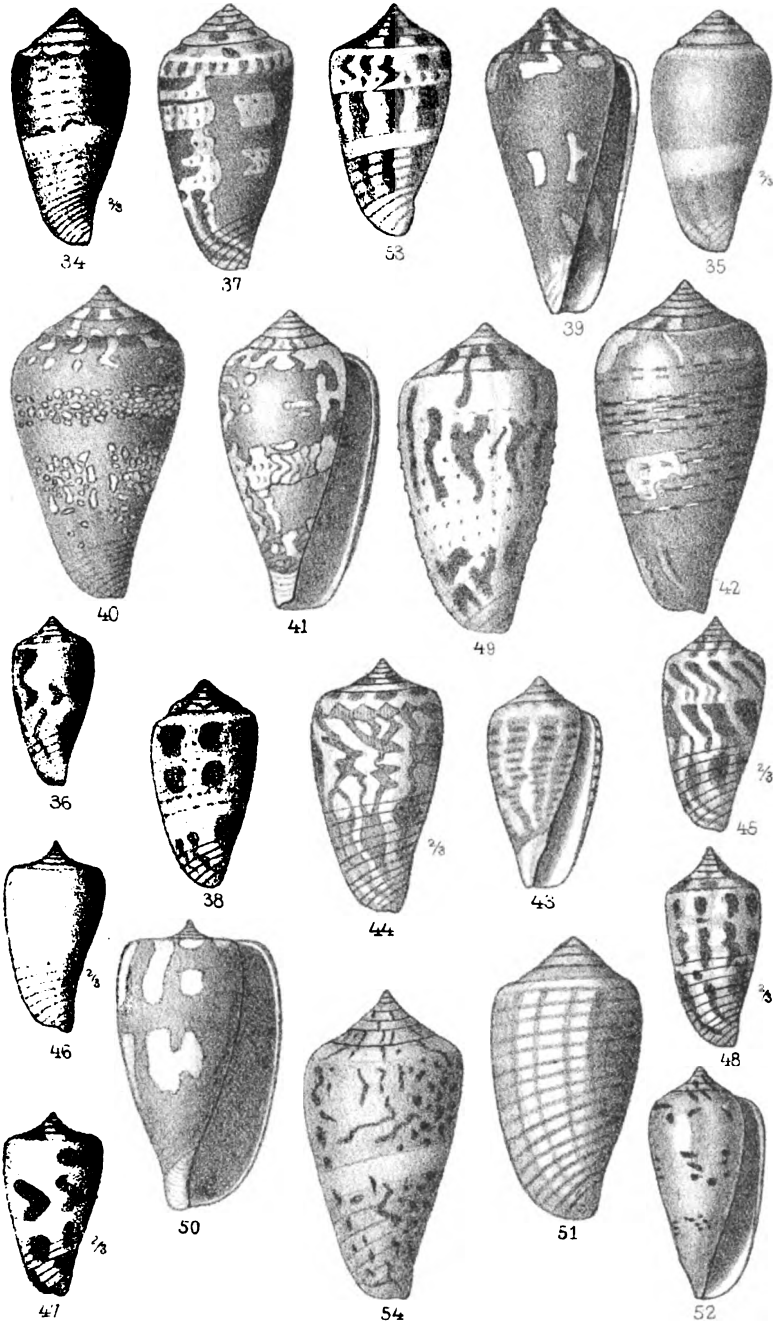
Digitized by Google

Digitized by Google



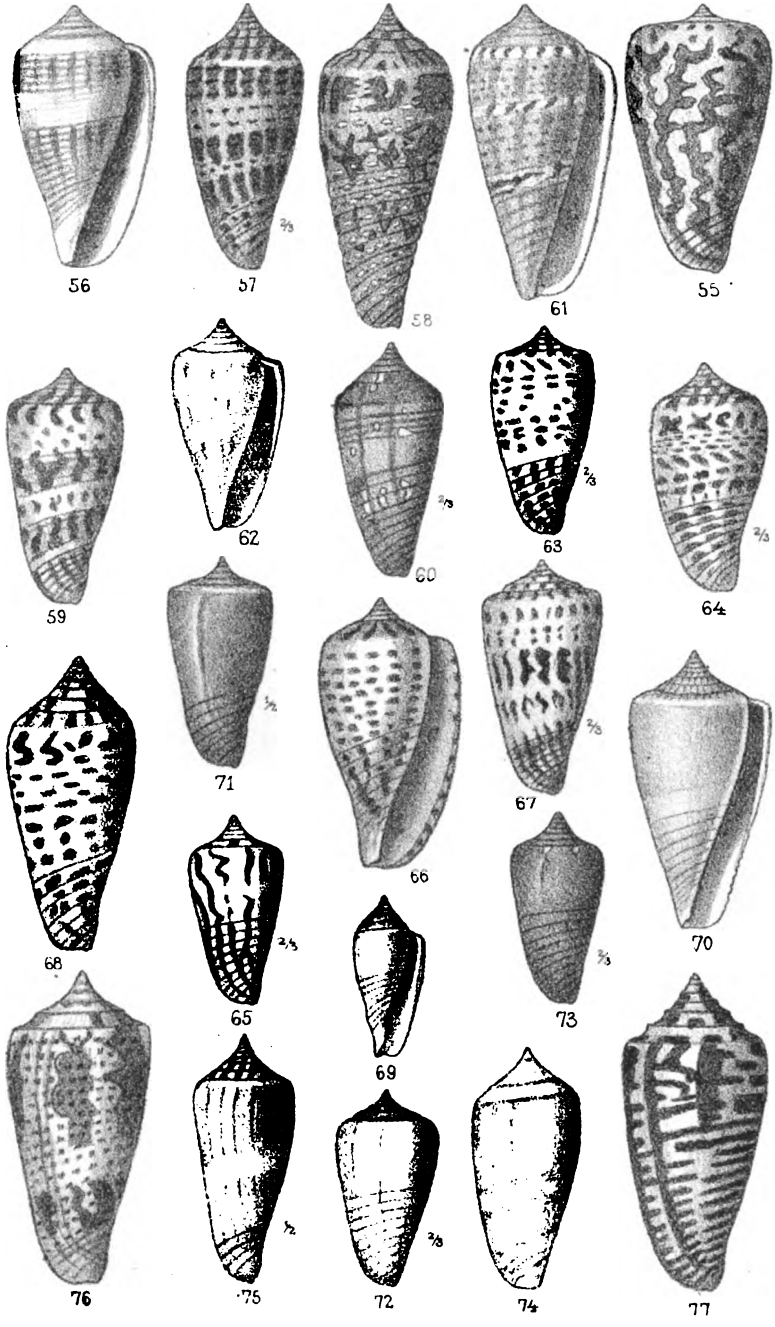
Digitized by Google

Digitized by Google



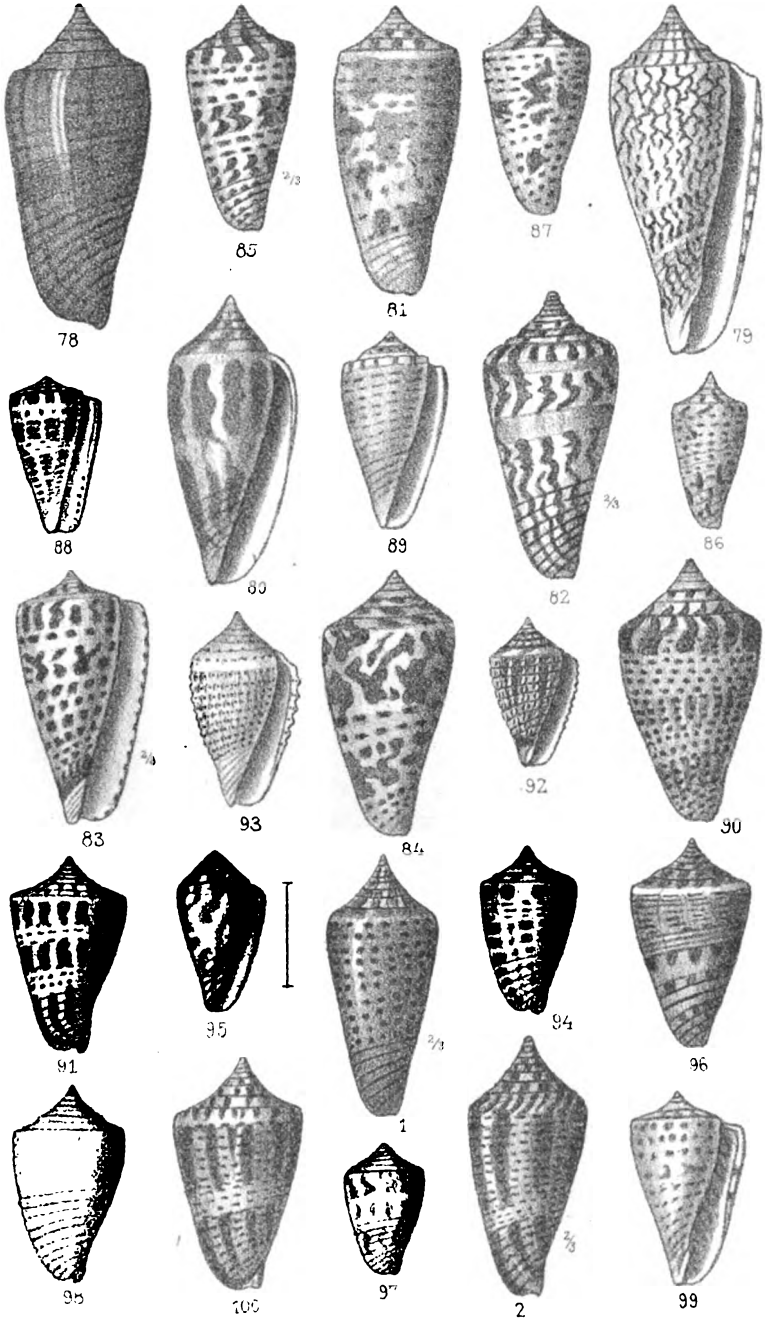
Digitized by Google

Digitized by Google



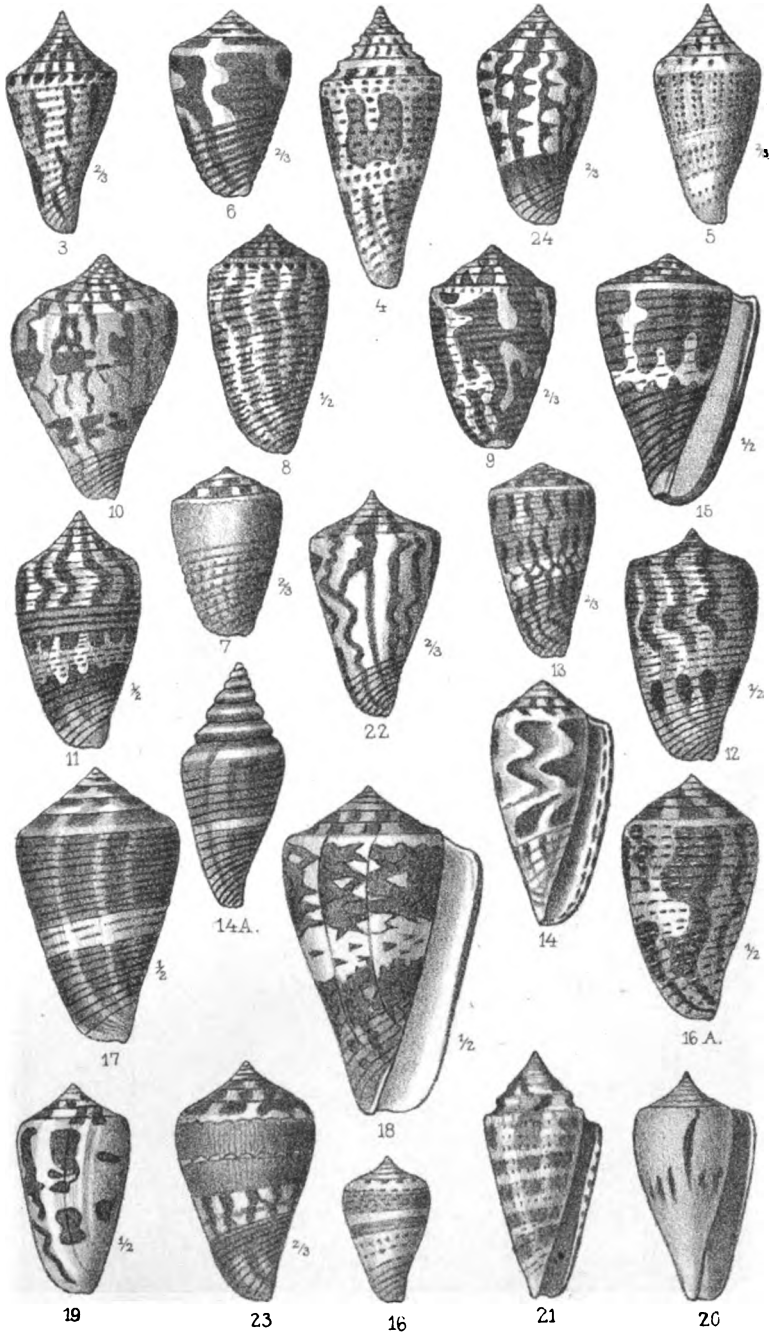
Digitized by Google

Digitized by Google



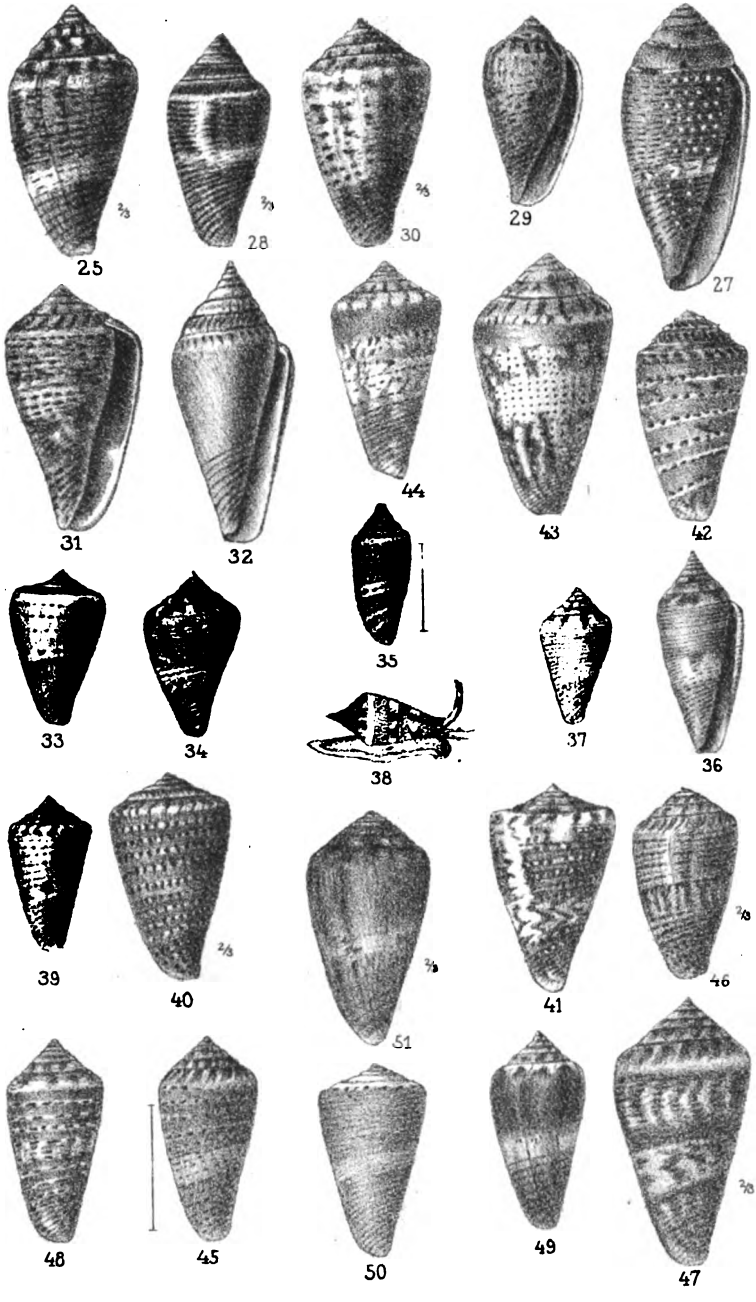
Digitized by Google

Digitized by Google



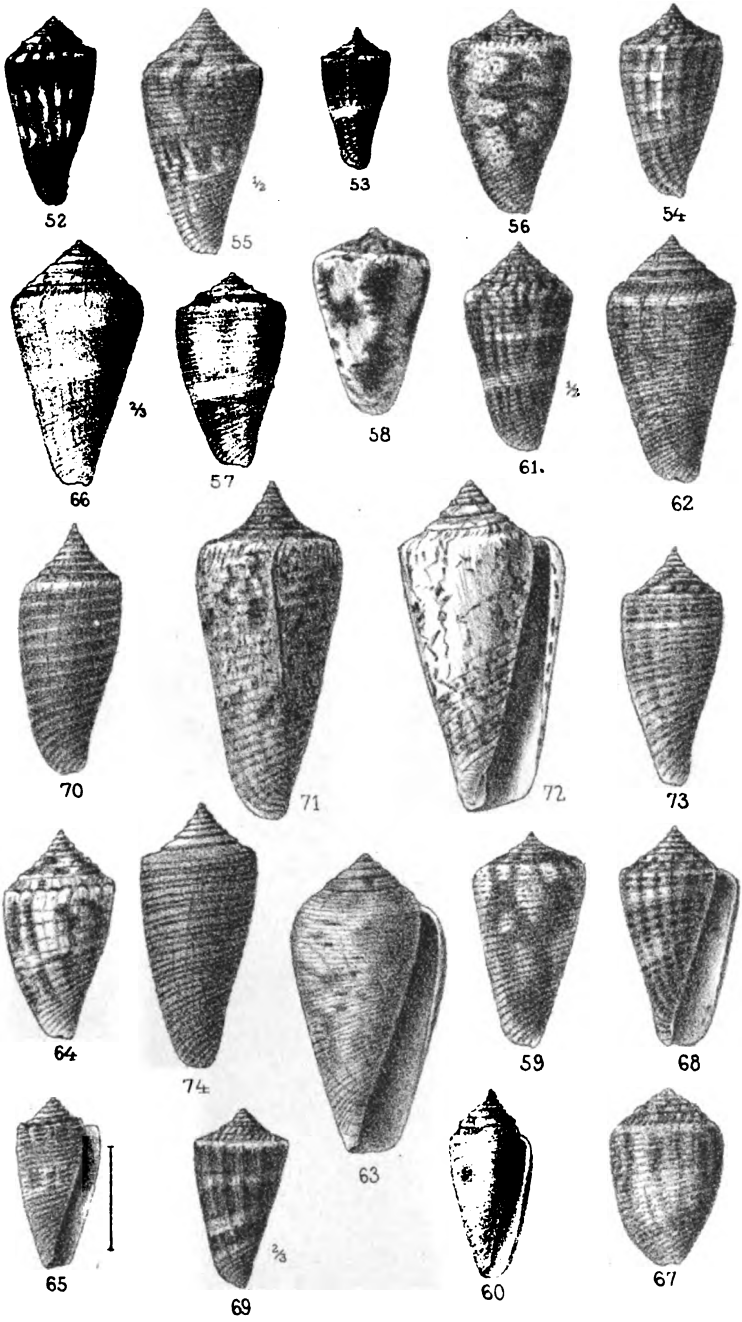
Digitized by Google

Digitized by Google



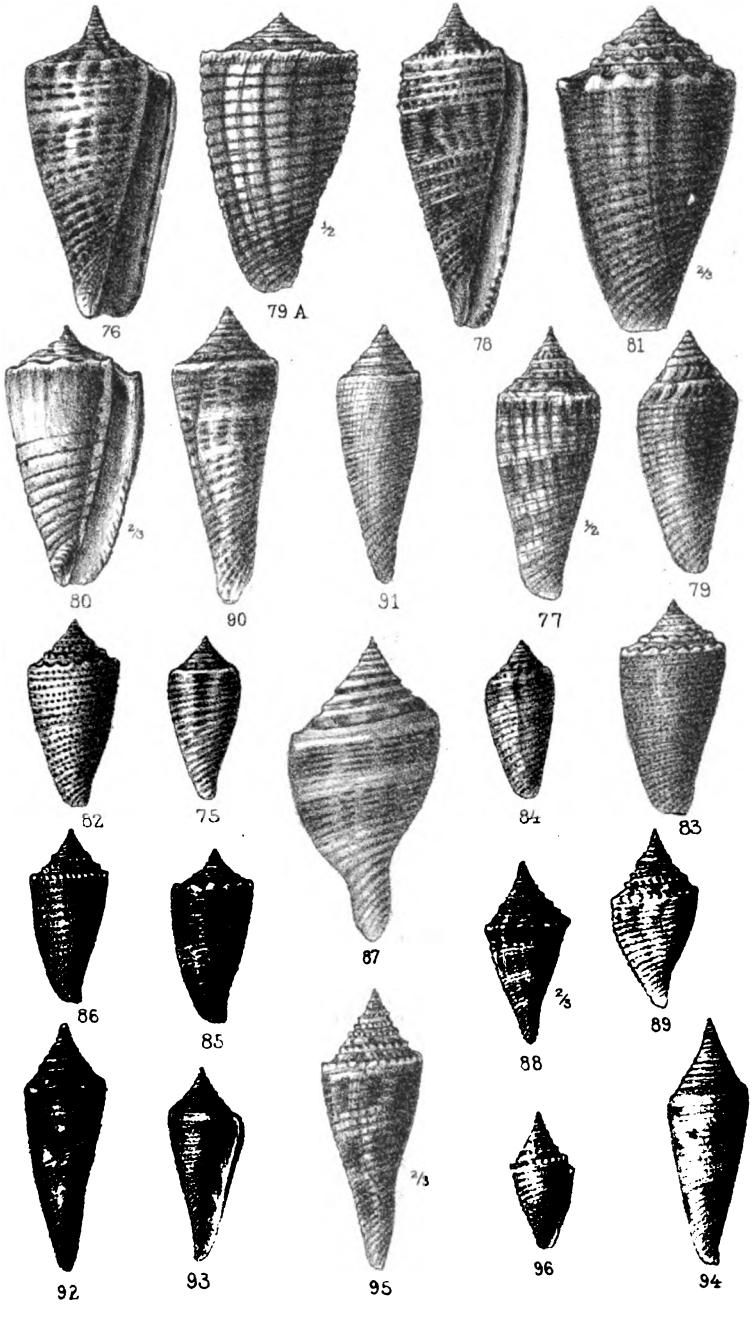
Digitized by Google

Digitized by Google



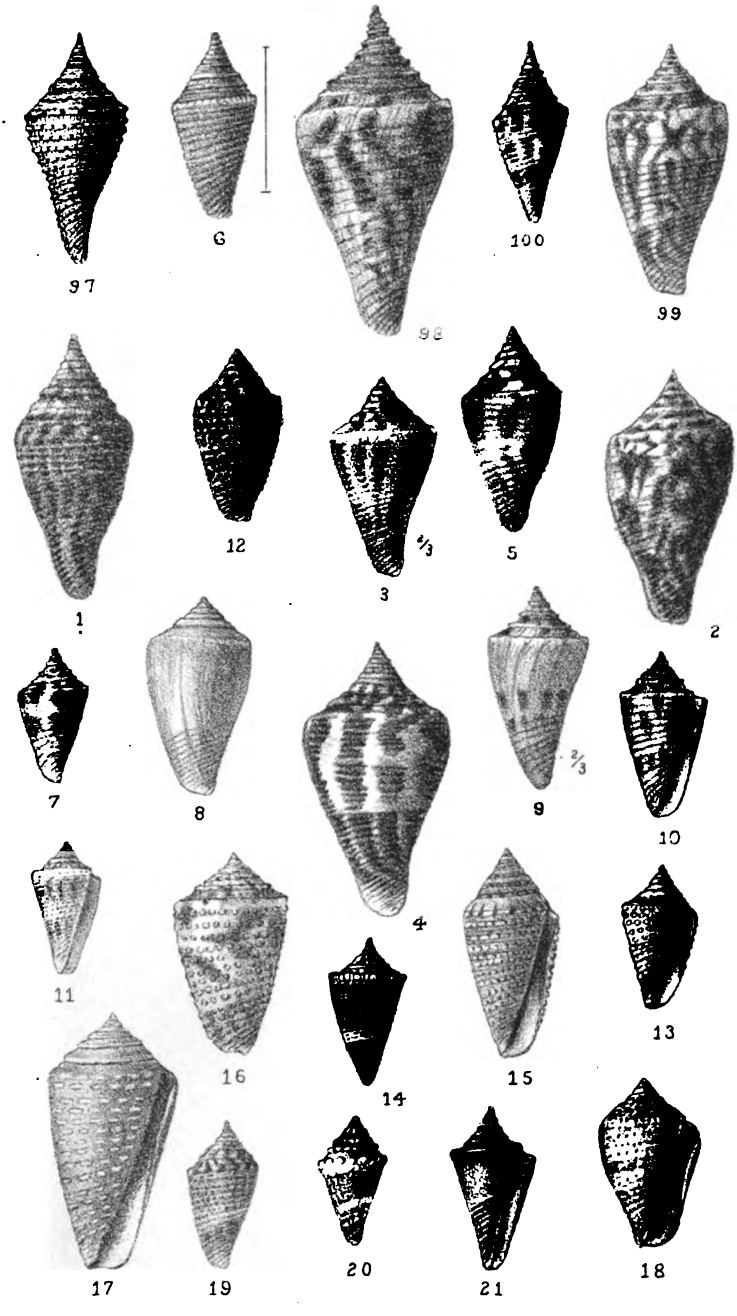
Digitized by Google

Digitized by Google



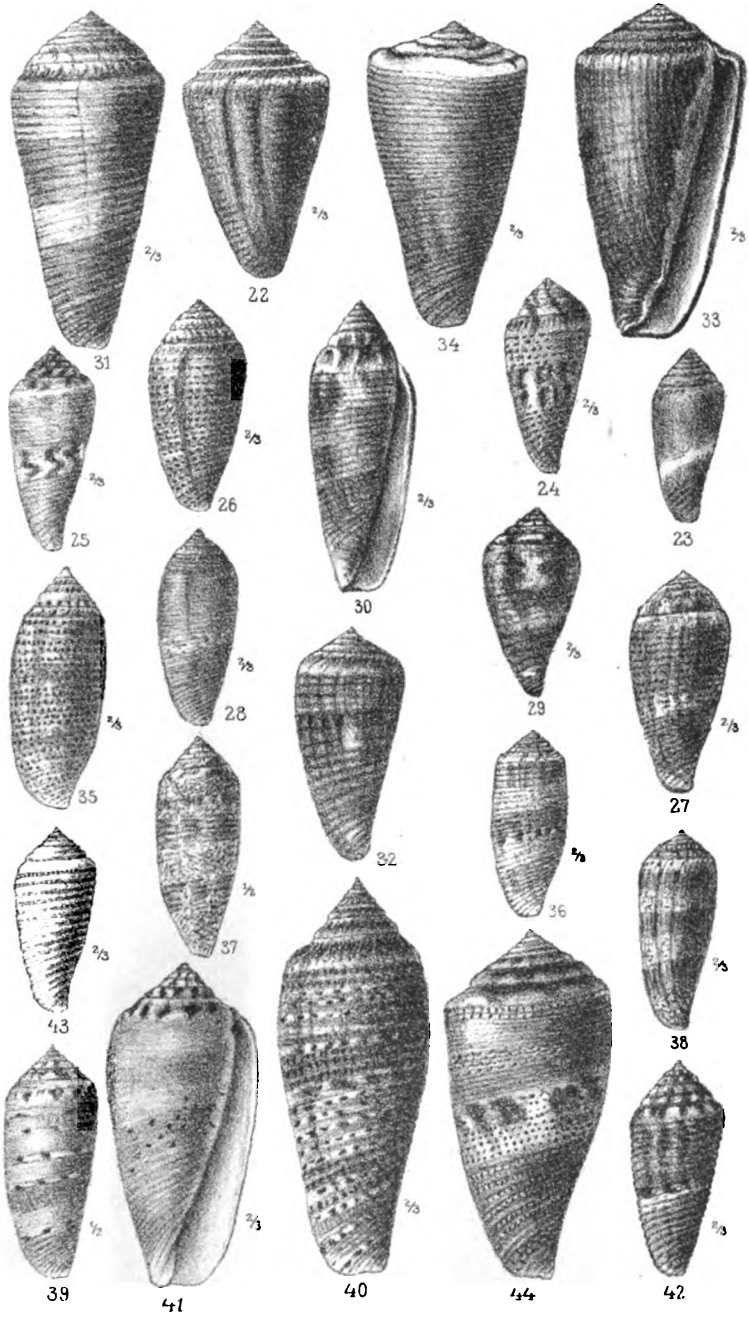
Digitized by Google

Digitized by Google



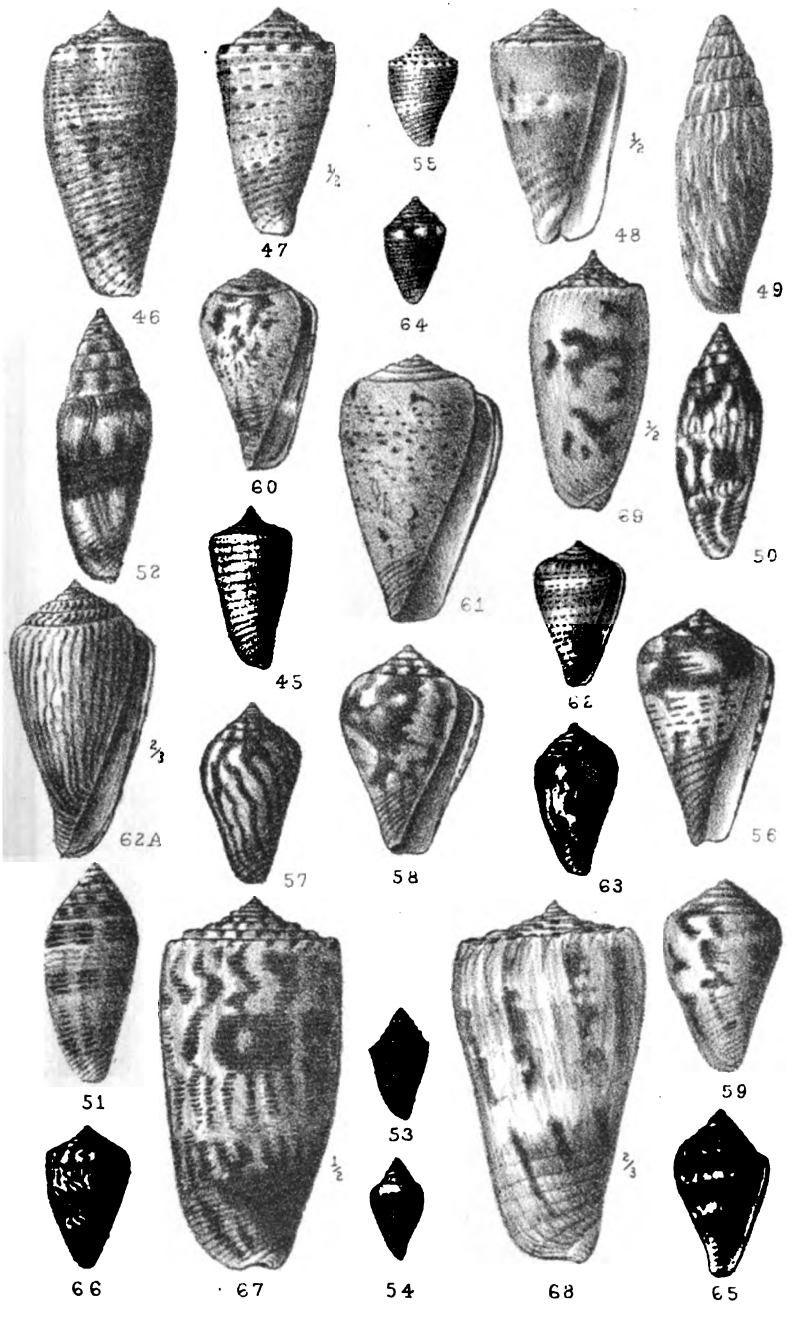
Digitized by Google

Digitized by Google



Digitized by Google

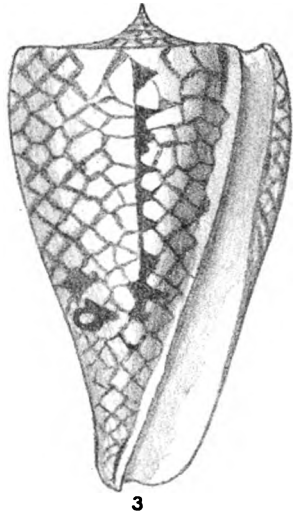
Digitized by Google

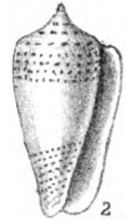


Digitized by Google

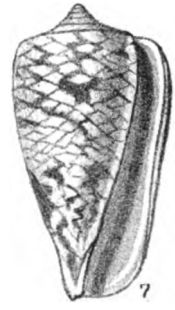
Digitized by Google

1

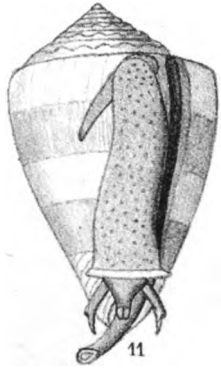

3

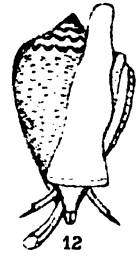

2

8


7

13


11


12

9

4

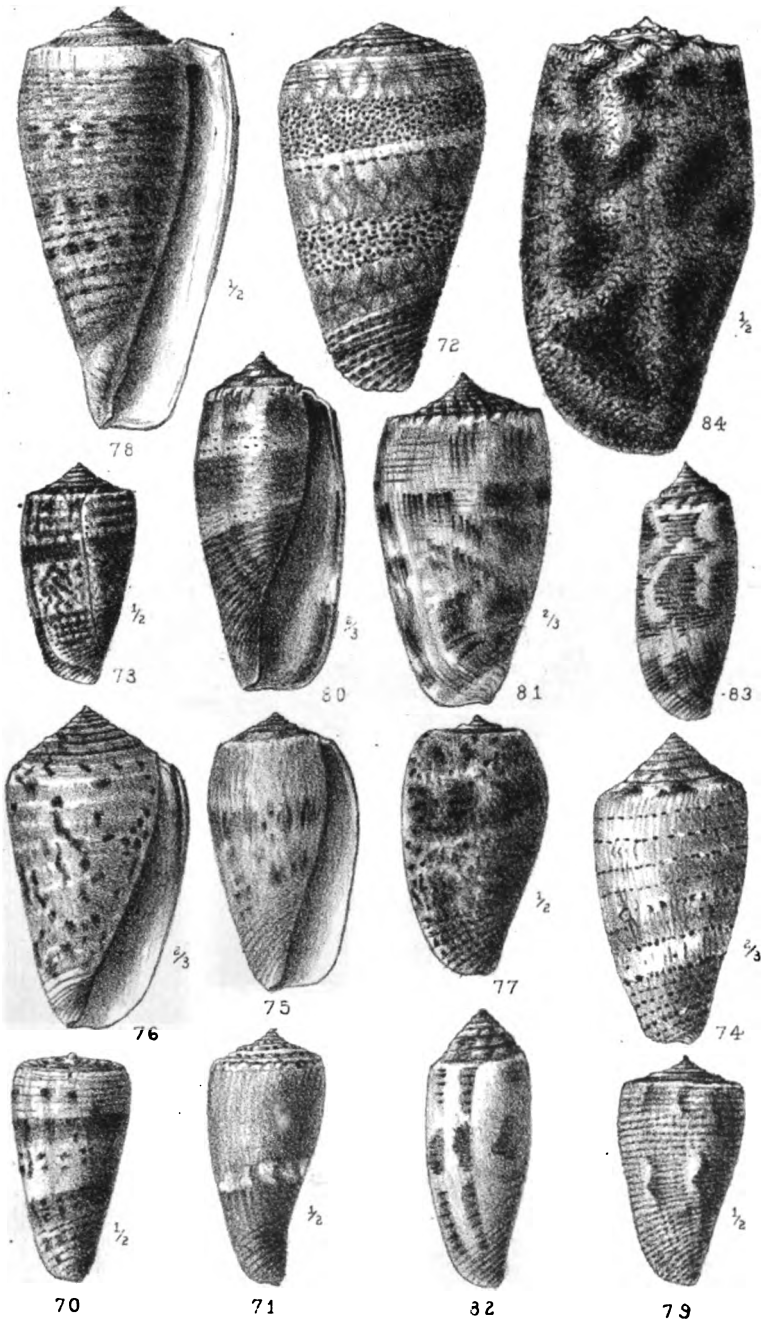
10

5

6

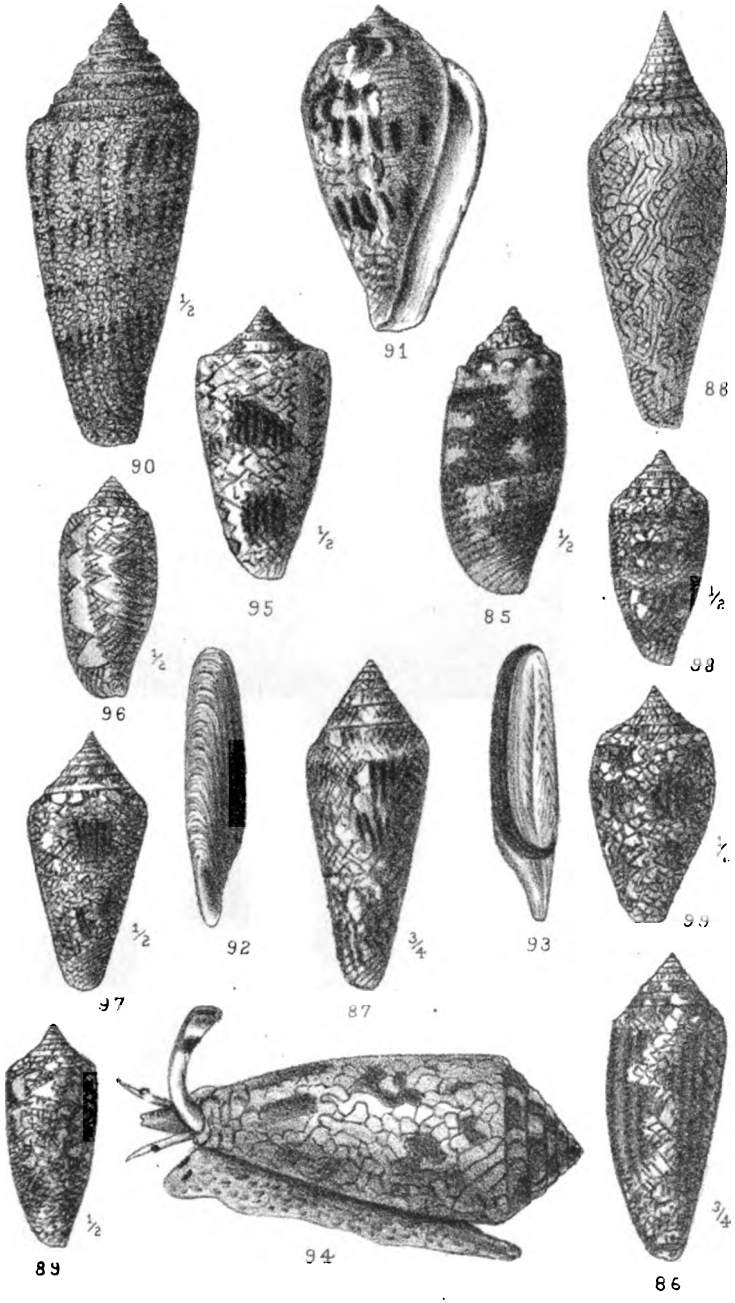
Digitized by Google

Digitized by Google



Digitized by Google

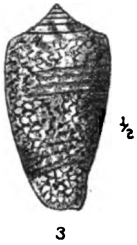
Digitized by Google



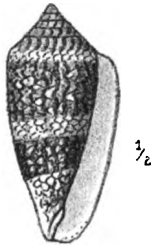
Digitized by Google

Digitized by Google

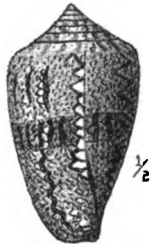
100



3



2

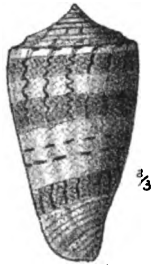


1

6

4

5

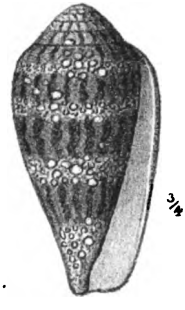


7

11

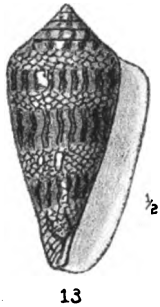
8

9



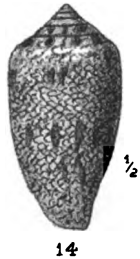
10

12



13

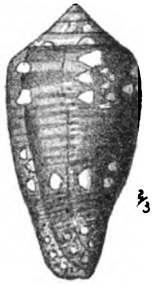
15



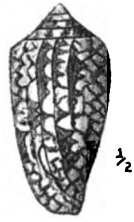
14

Digitized by Google

Digitized by Google

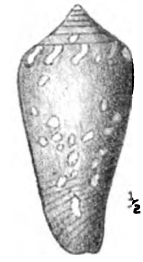


18



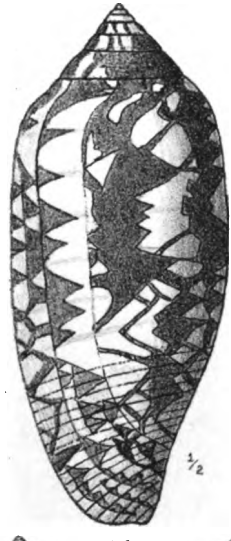
25

27



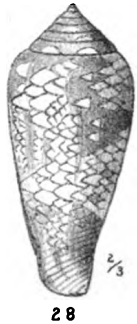
16

23



29

26



28

20

22

30

24

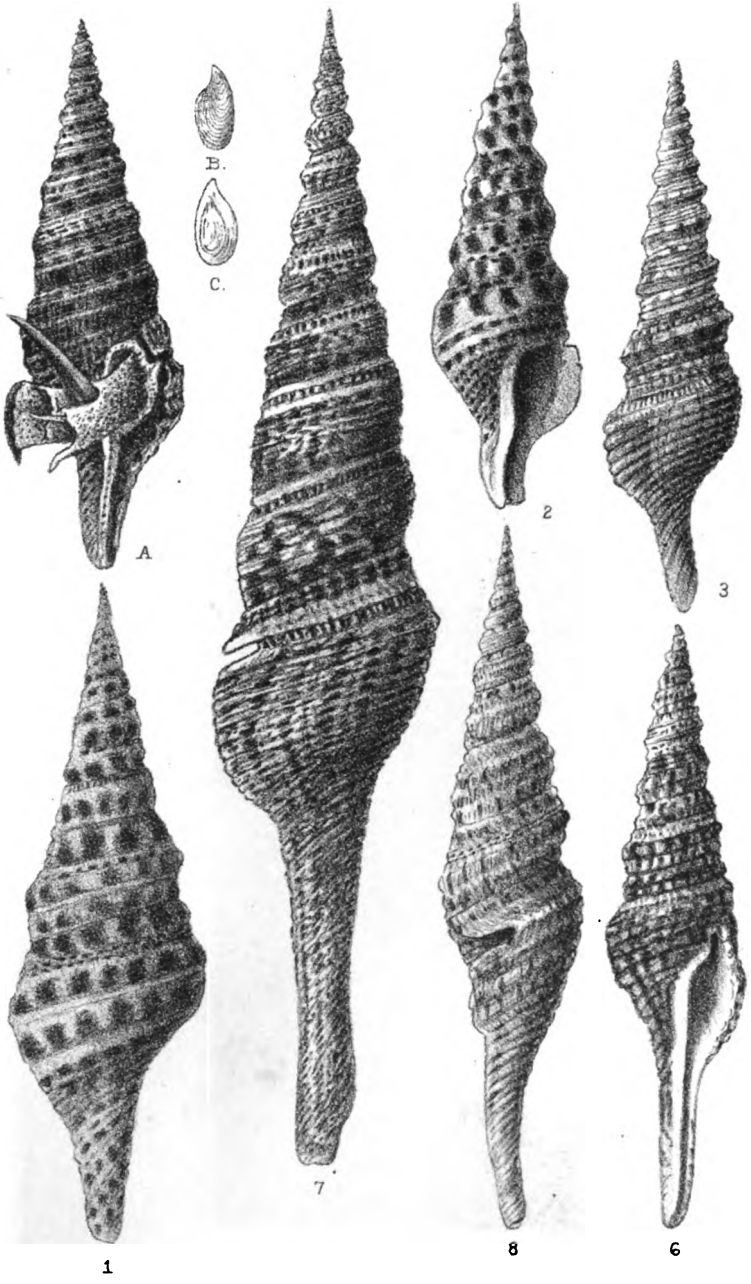
19

17

21

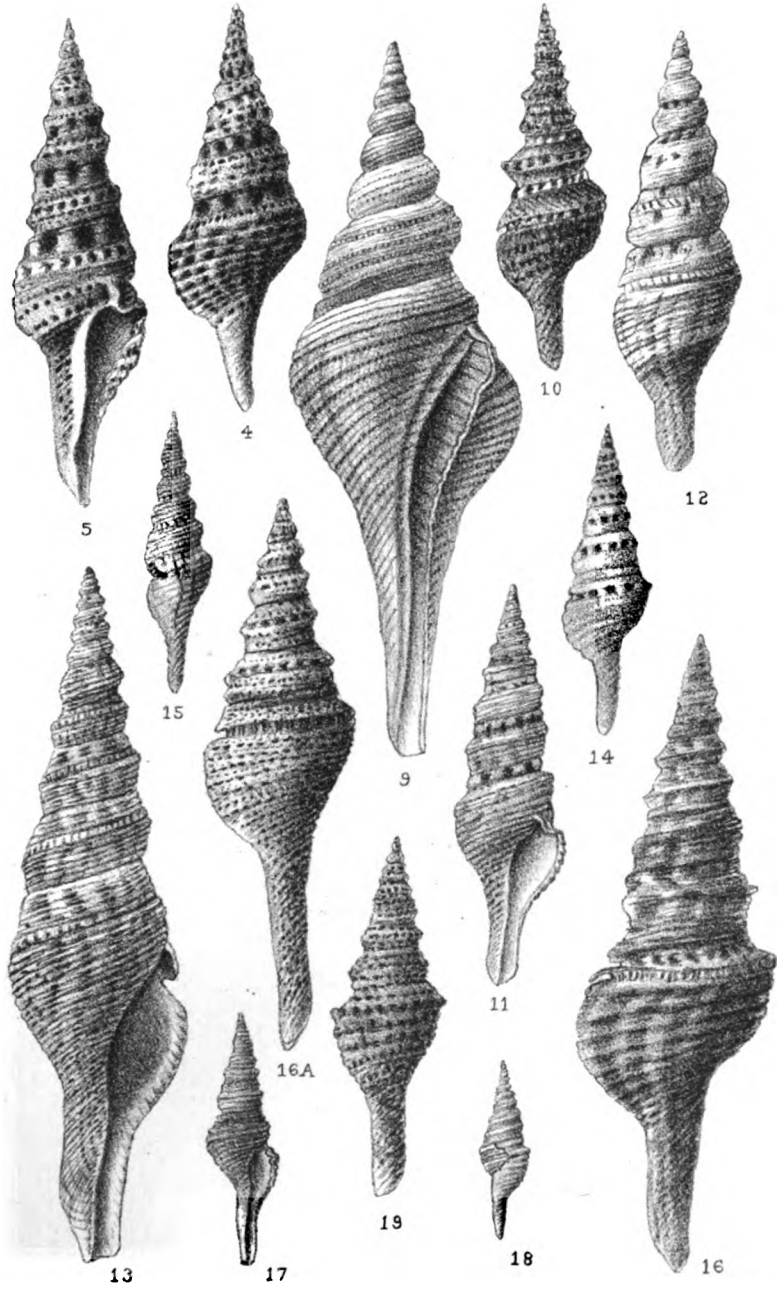
Digitized by Google

Digitized by Google



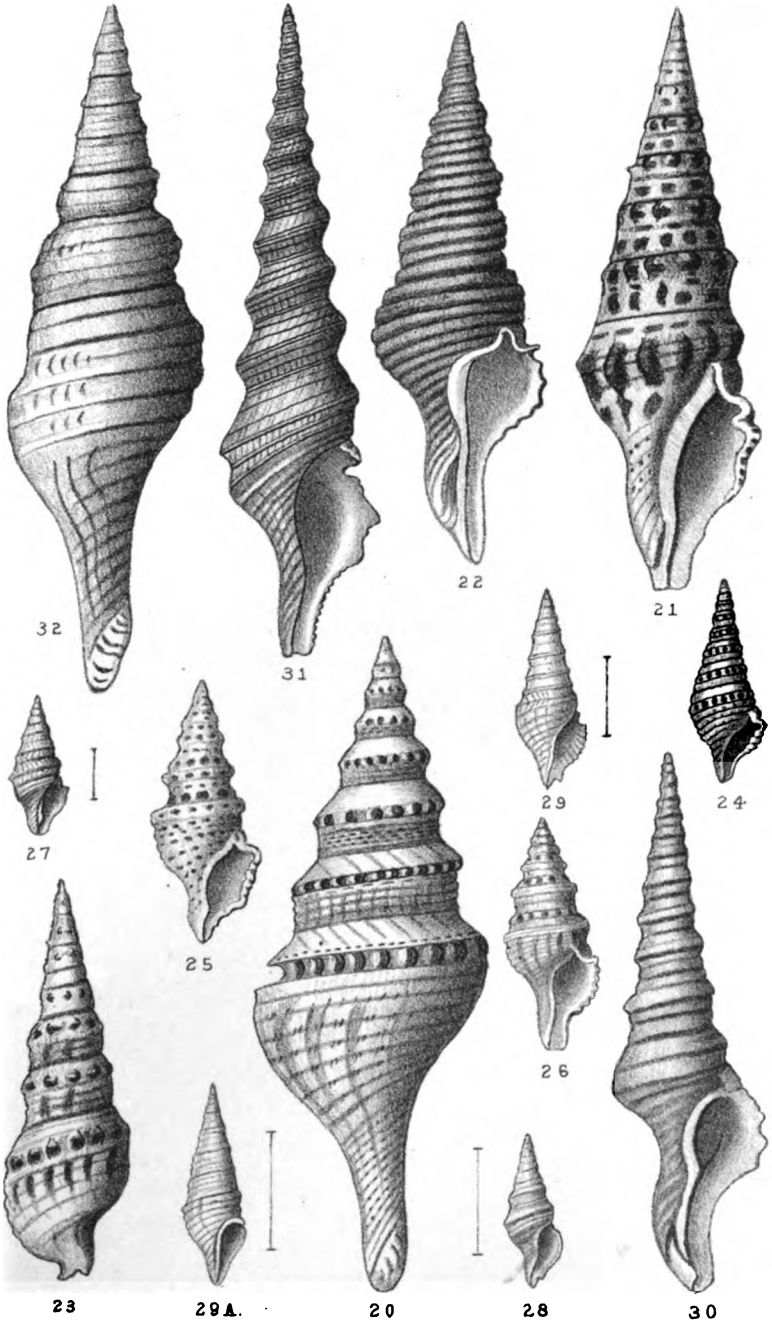
Digitized by Google

Digitized by Google



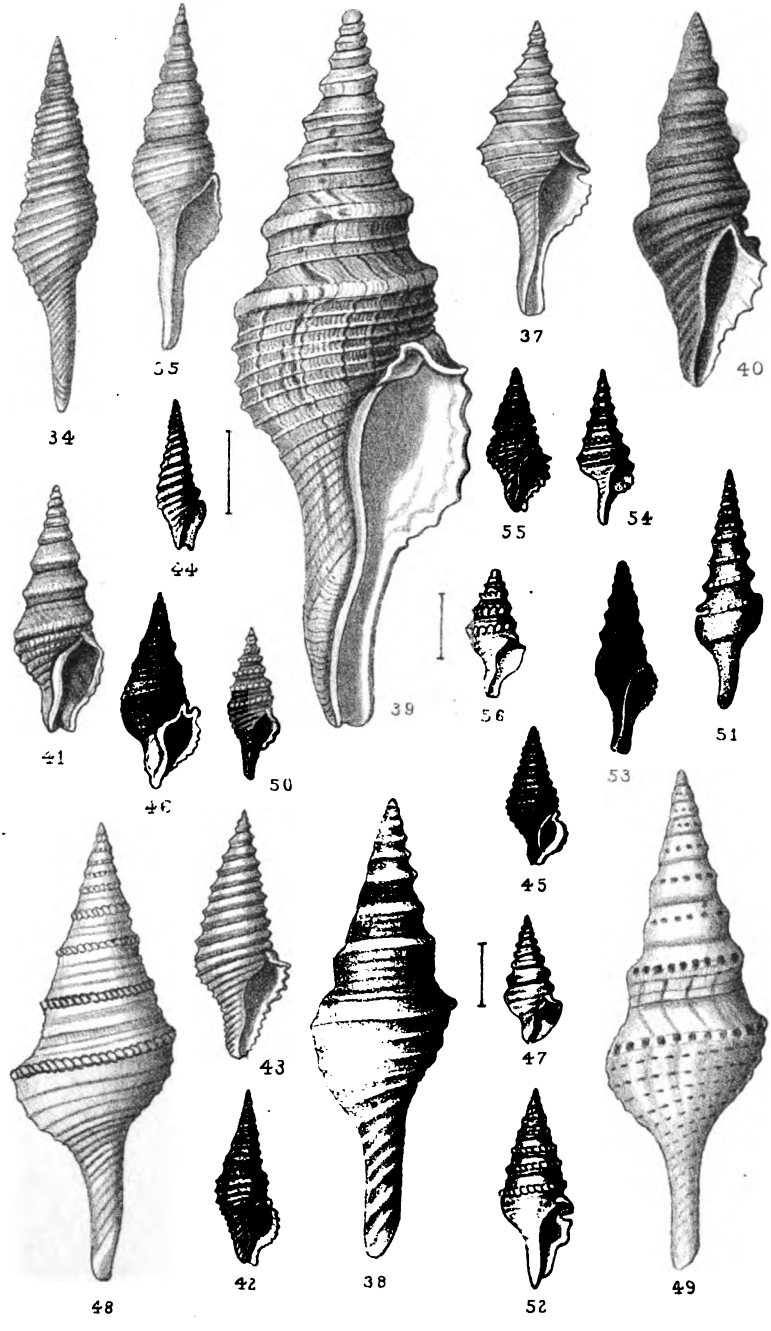
Digitized by Google

Digitized by Google



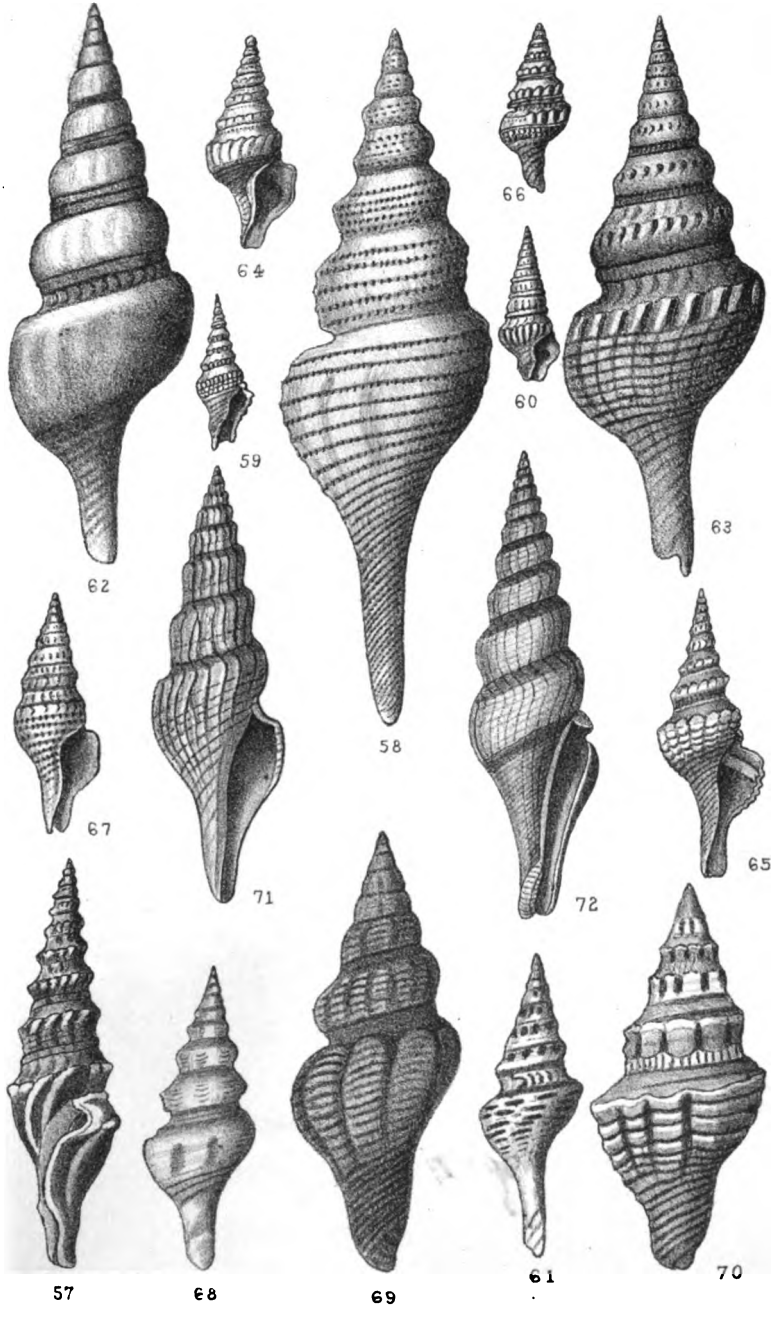
Digitized by Google

Digitized by Google



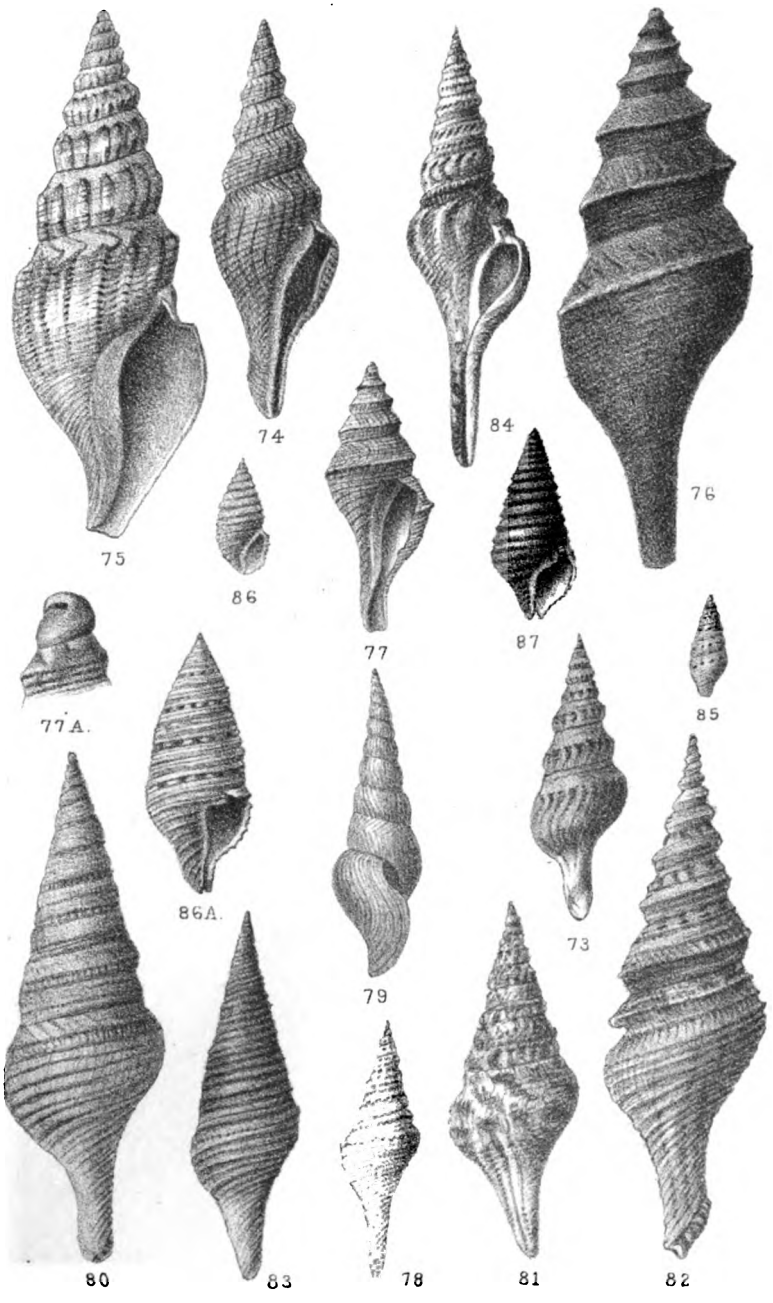
Digitized by Google

Digitized by Google



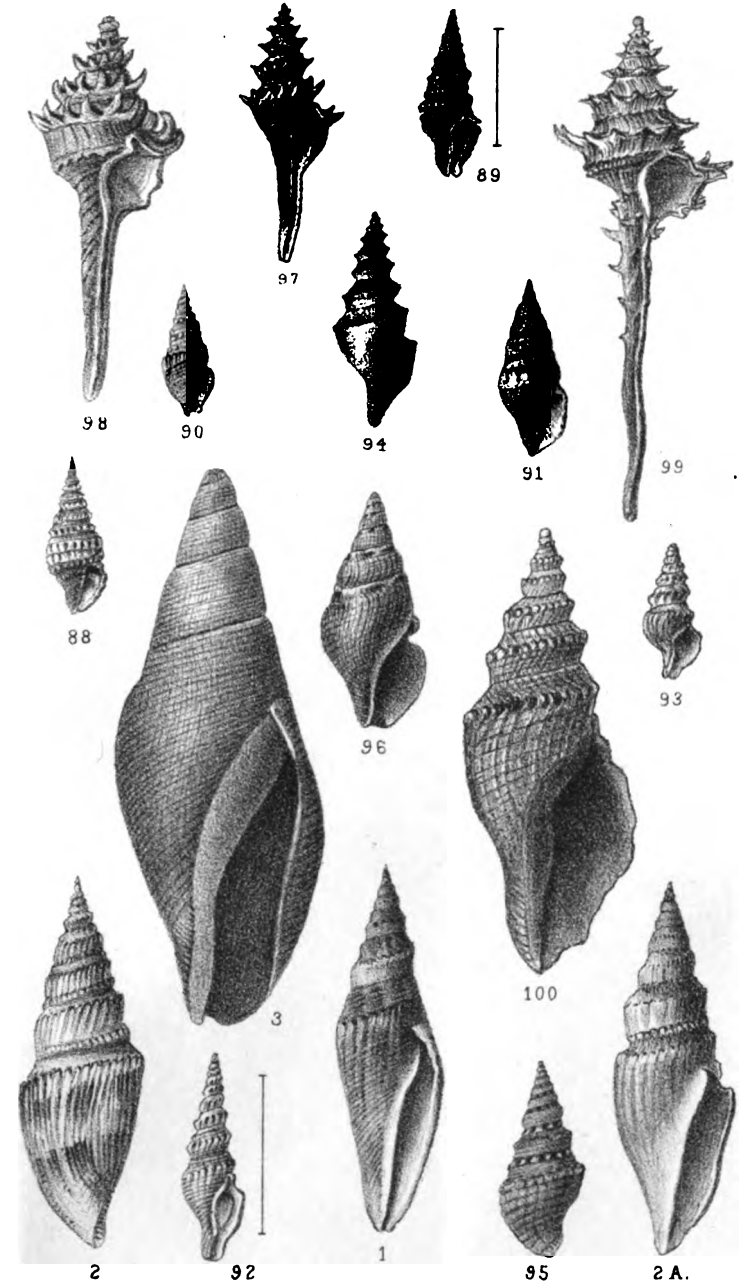
Digitized by Google

Digitized by Google



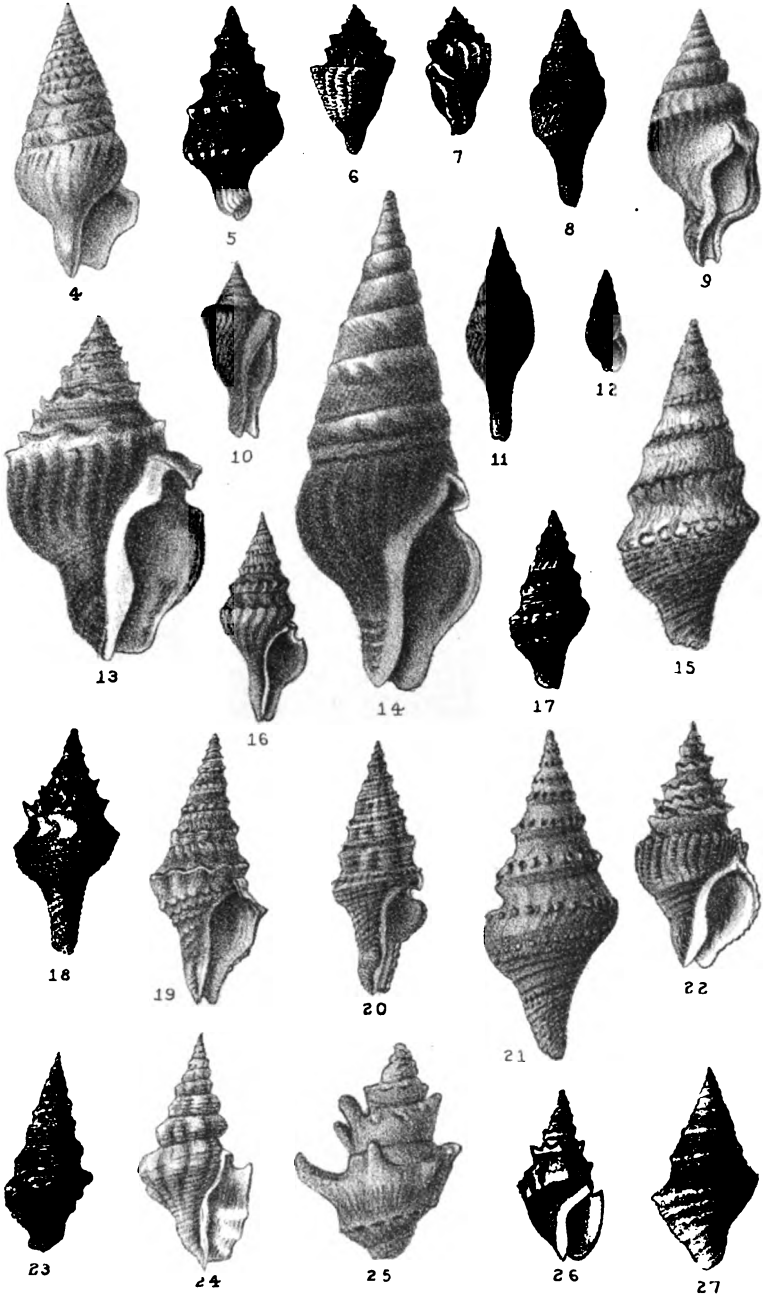
Digitized by Google

Digitized by Google



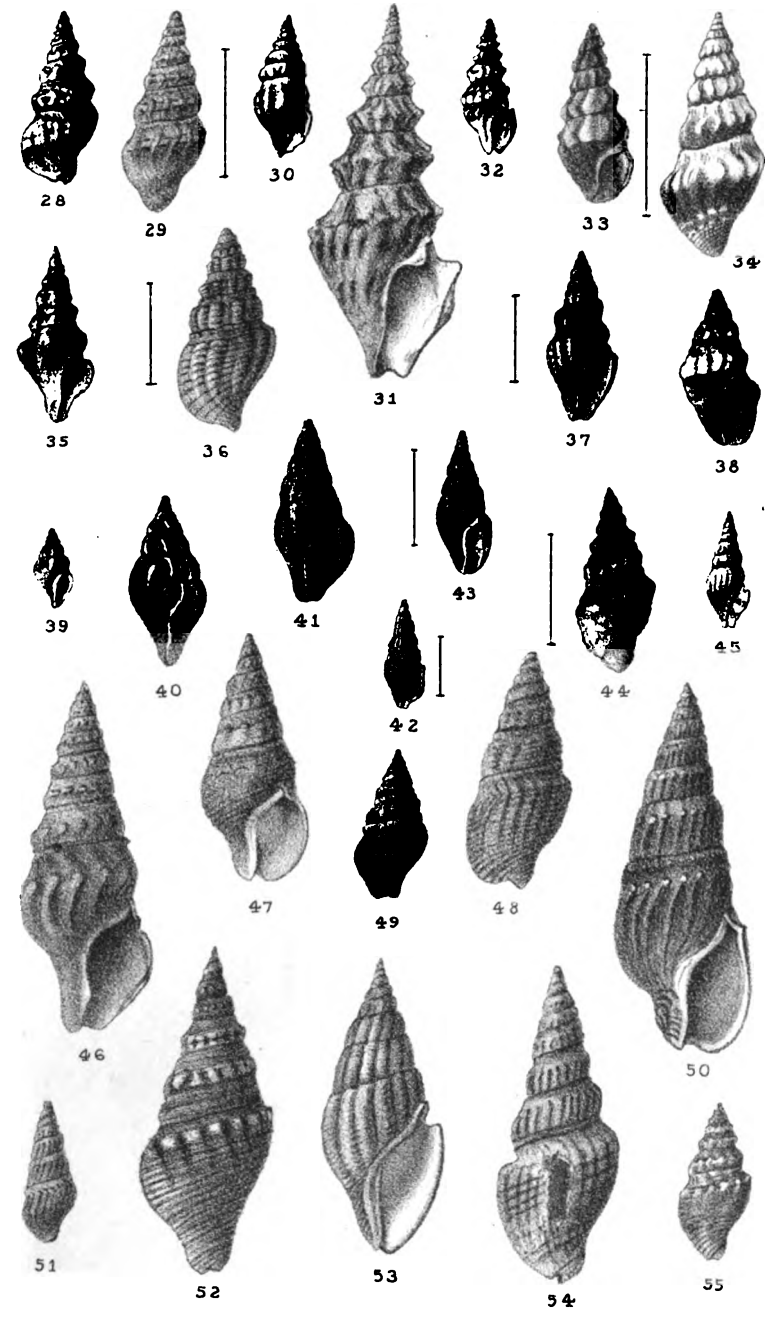
Digitized by Google

Digitized by Google



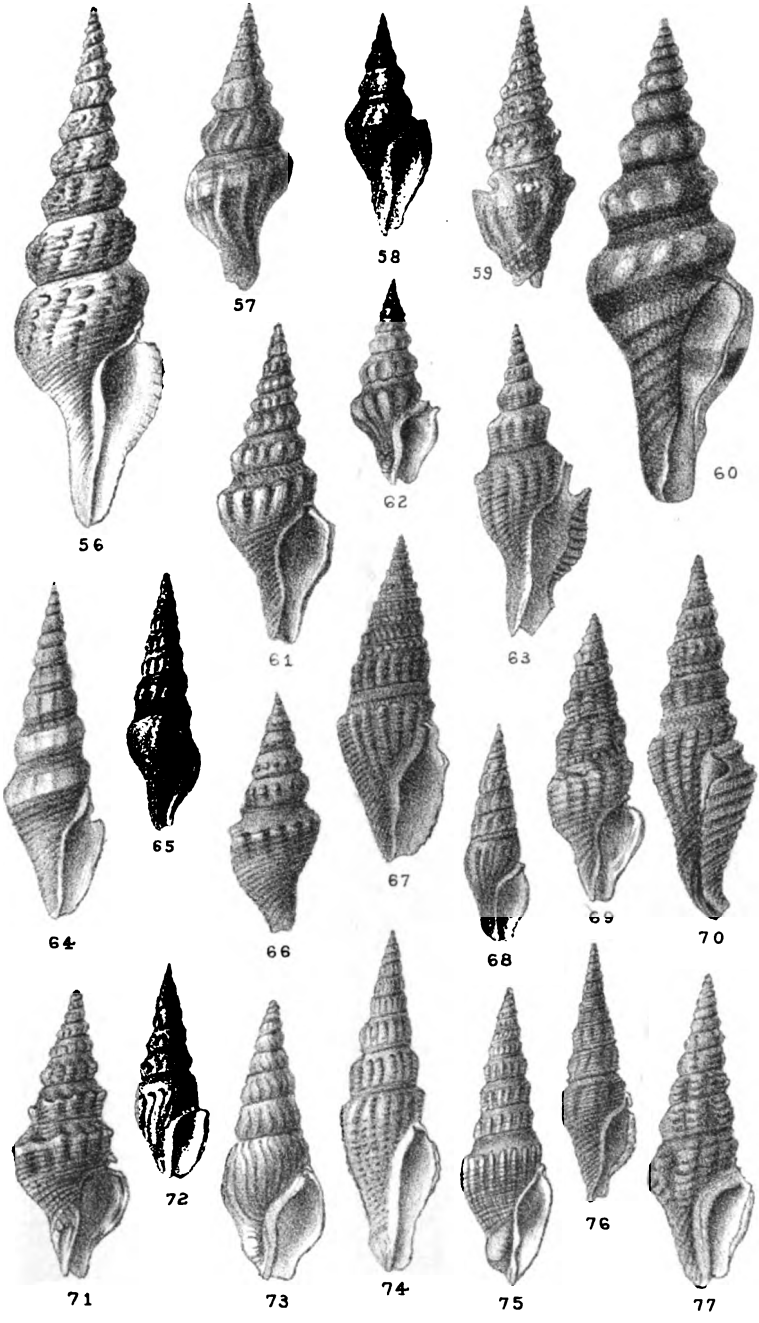
Digitized by Google

Digitized by Google



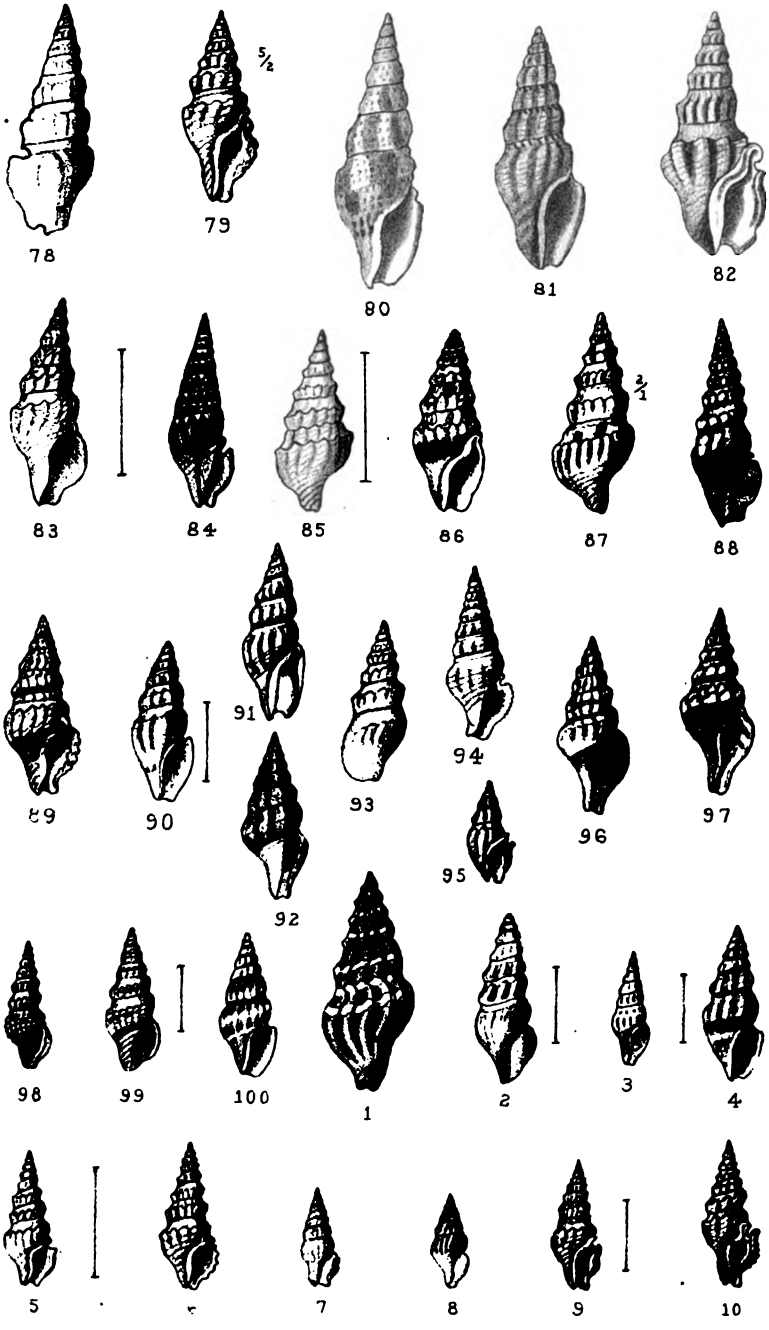
Digitized by Google

Digitized by Google



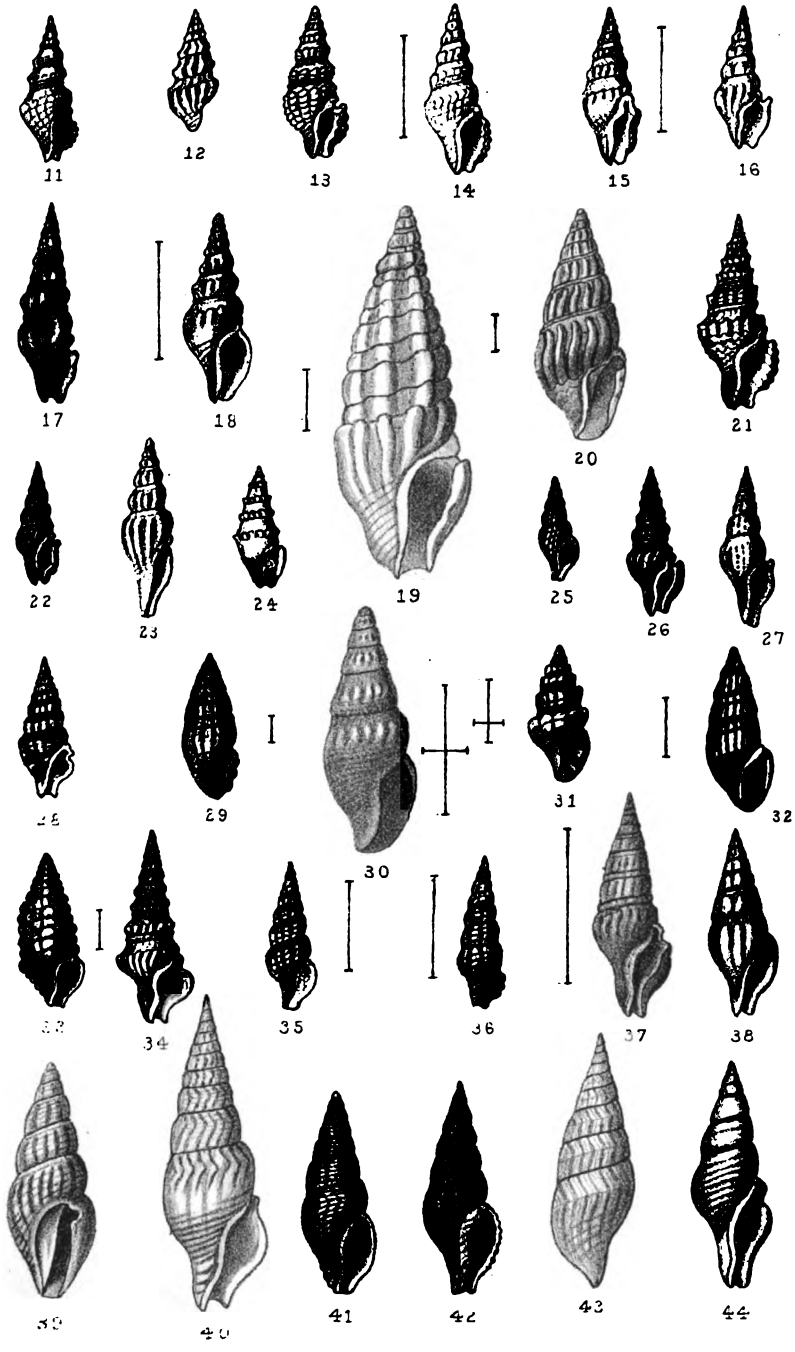
Digitized by Google

Digitized by Google



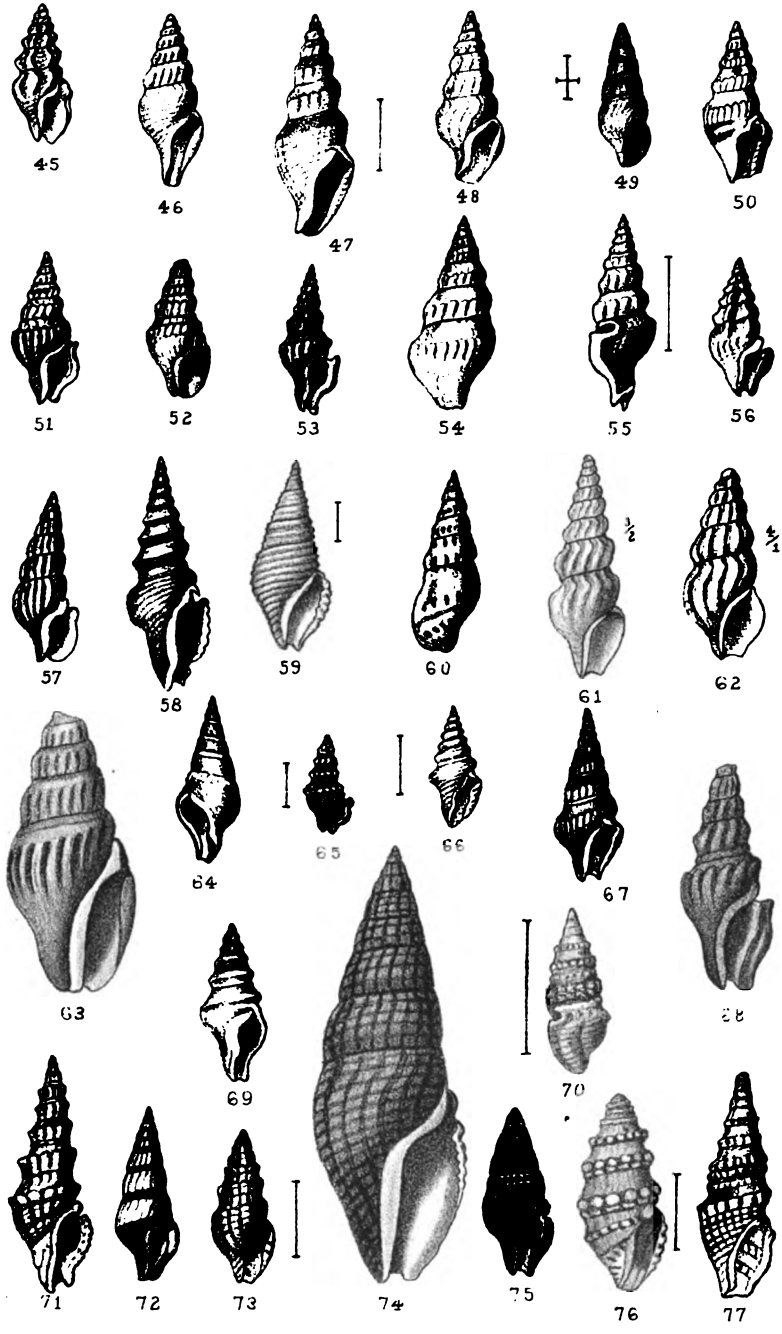
Digitized by Google

Digitized by Google



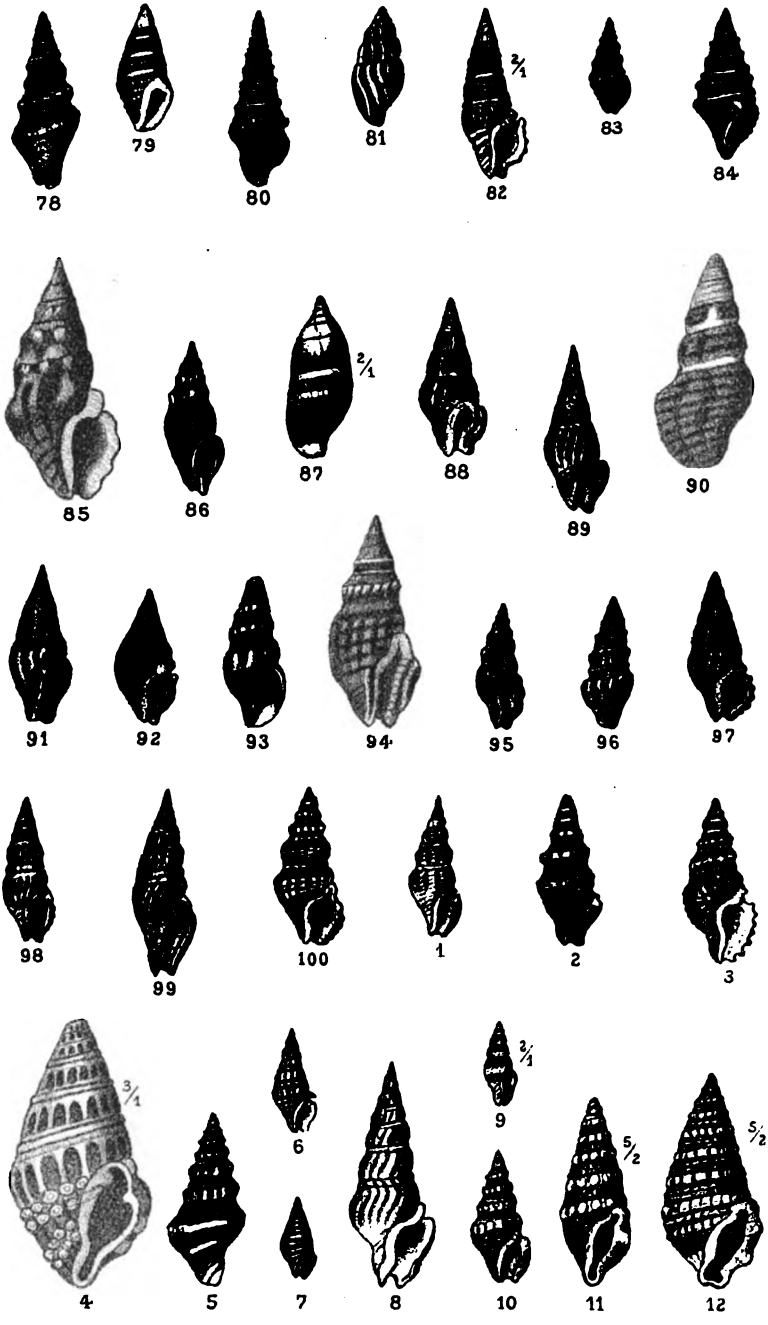
Digitized by Google

Digitized by Google



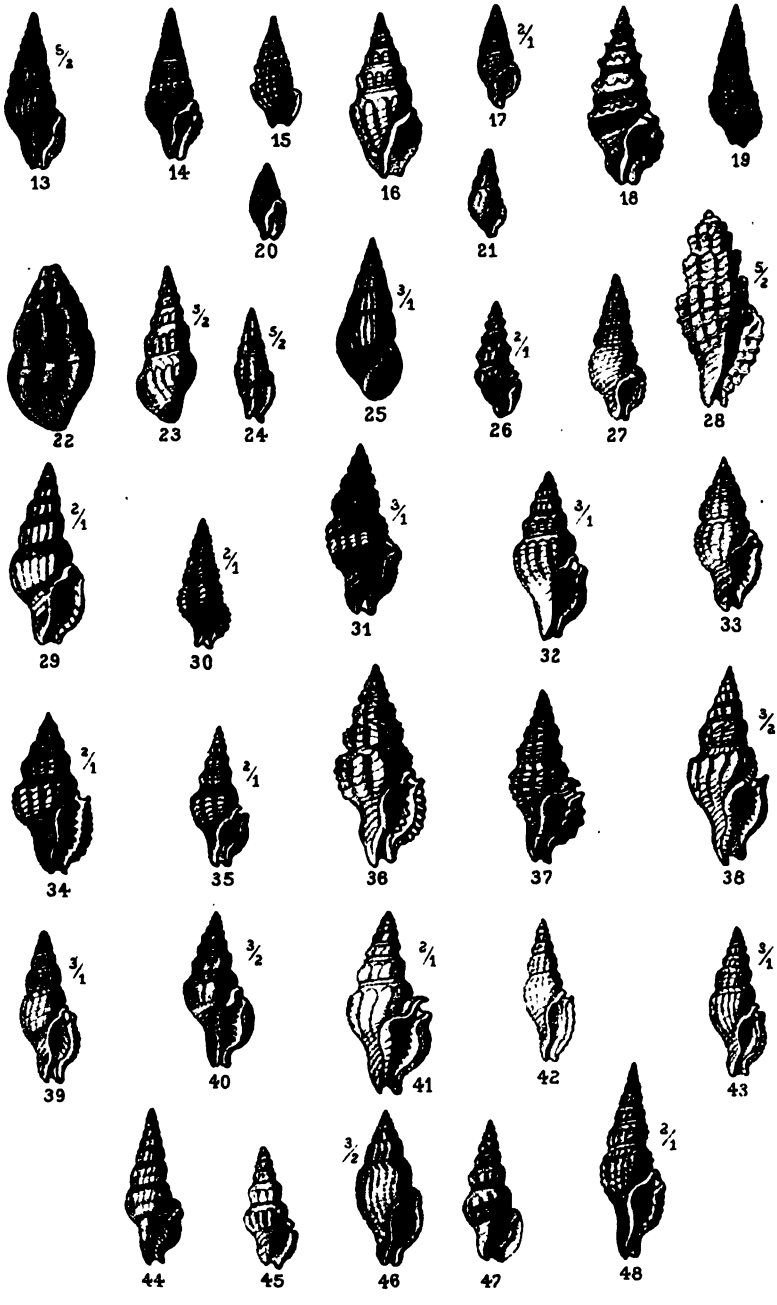
Digitized by Google

Digitized by Google



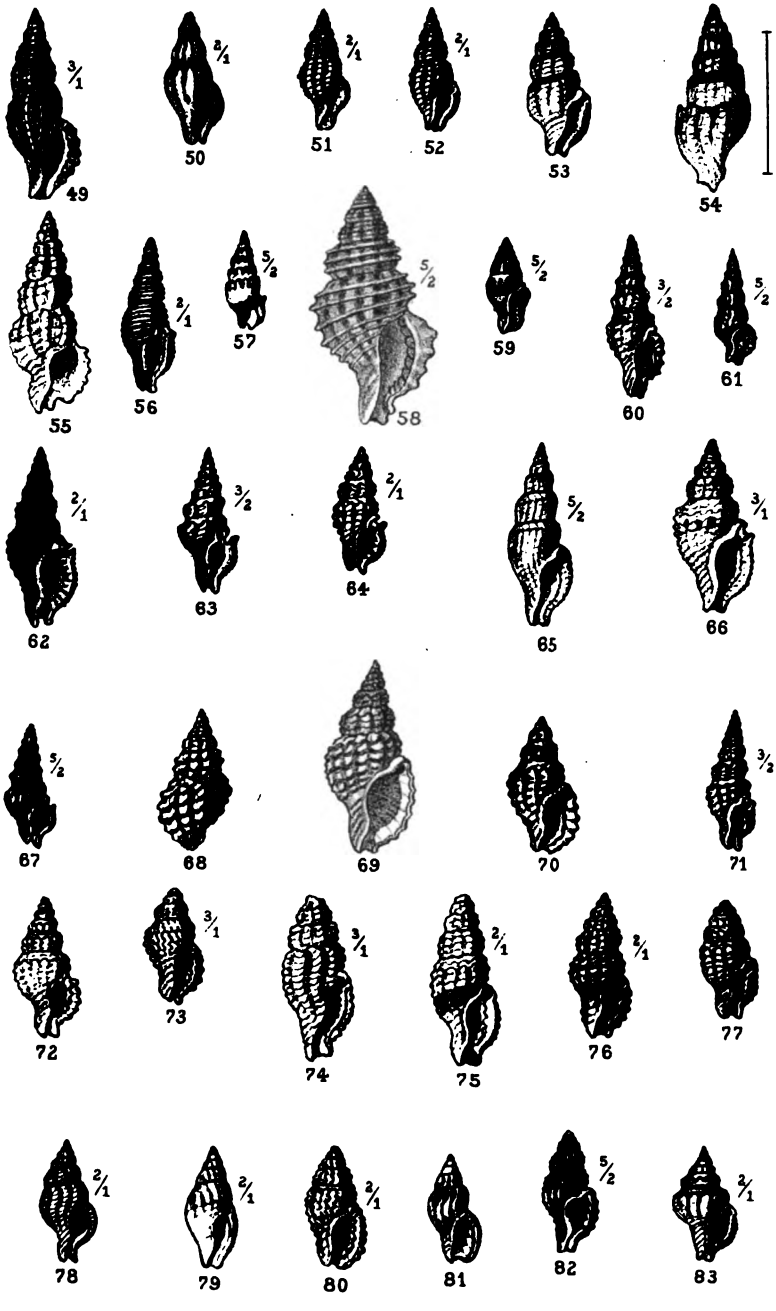
Digitized by Google

Digitized by Google



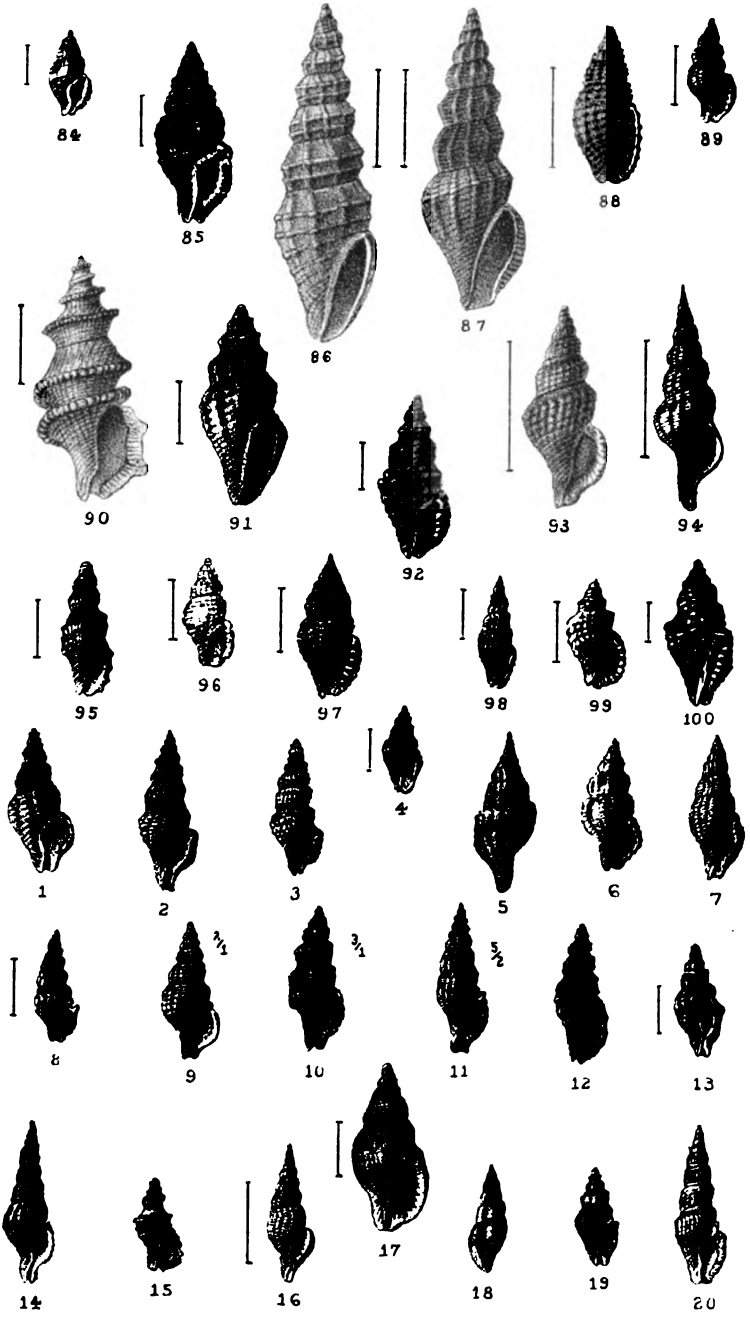
Digitized by Google

Digitized by Google



Digitized by Google

Digitized by Google



Digitized by Google

Digitized by Google

PLEUROTOMIDÆ. PLATE 18.

21

22

23

24

25

26

27

28

29

30

The above figures all enlarged.

31

32

33

3/1
34

35

3/1
36

3/1
37

38

3/1
39

40

41

2/1
42

3/1
43

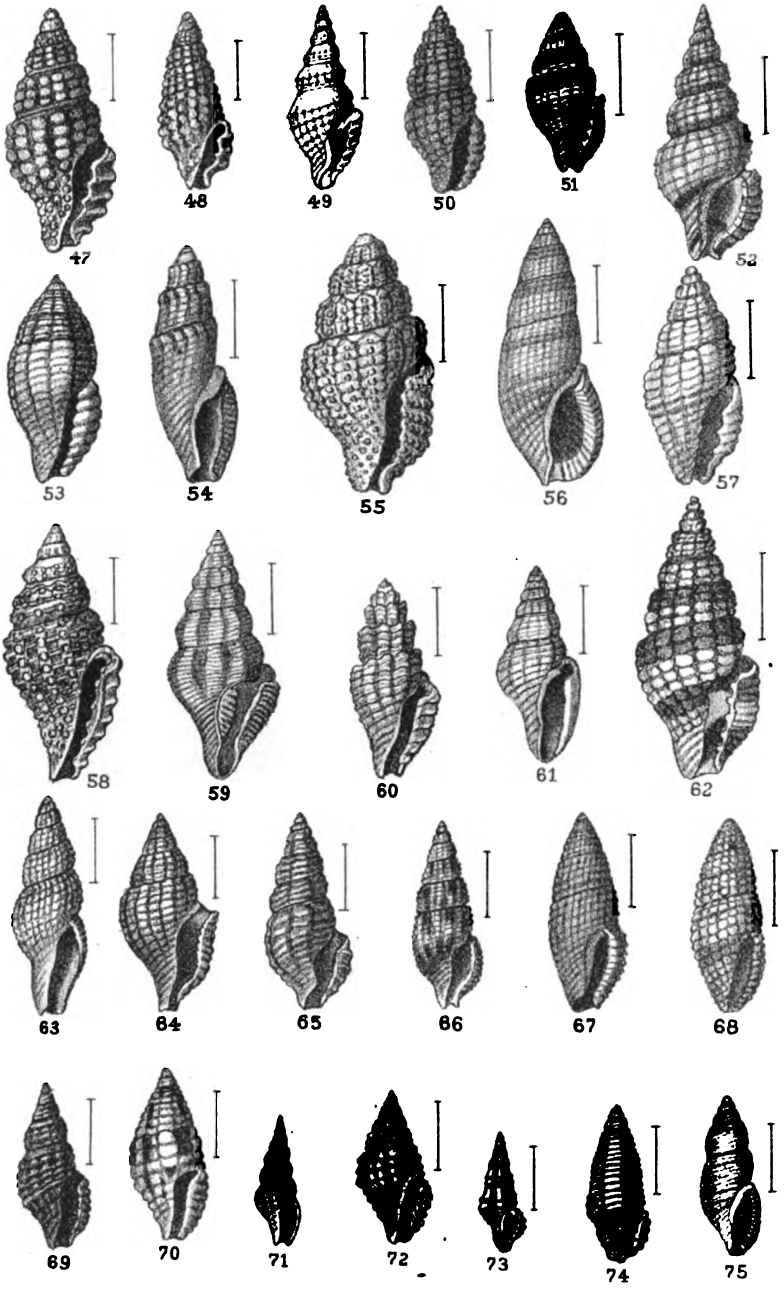
2/1
44

3/1
45

3/2
46

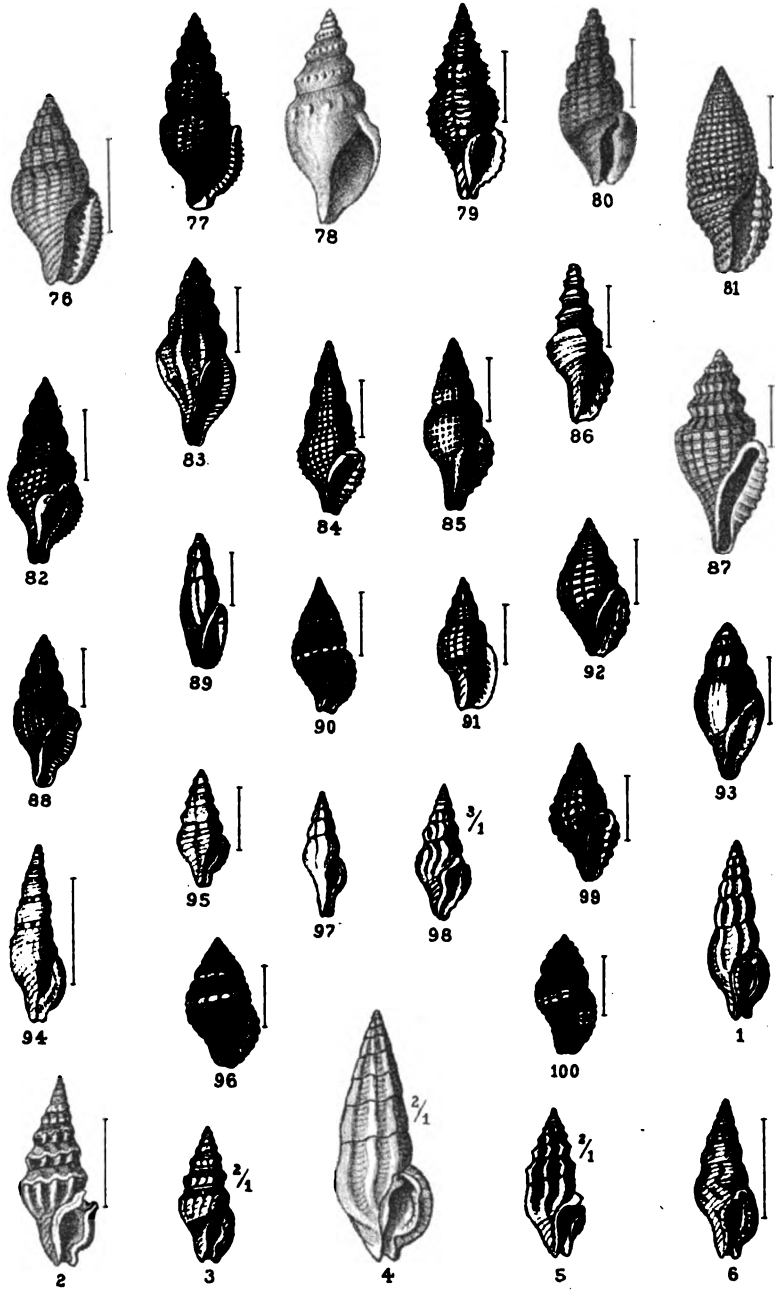
Digitized by Google

Digitized by Google



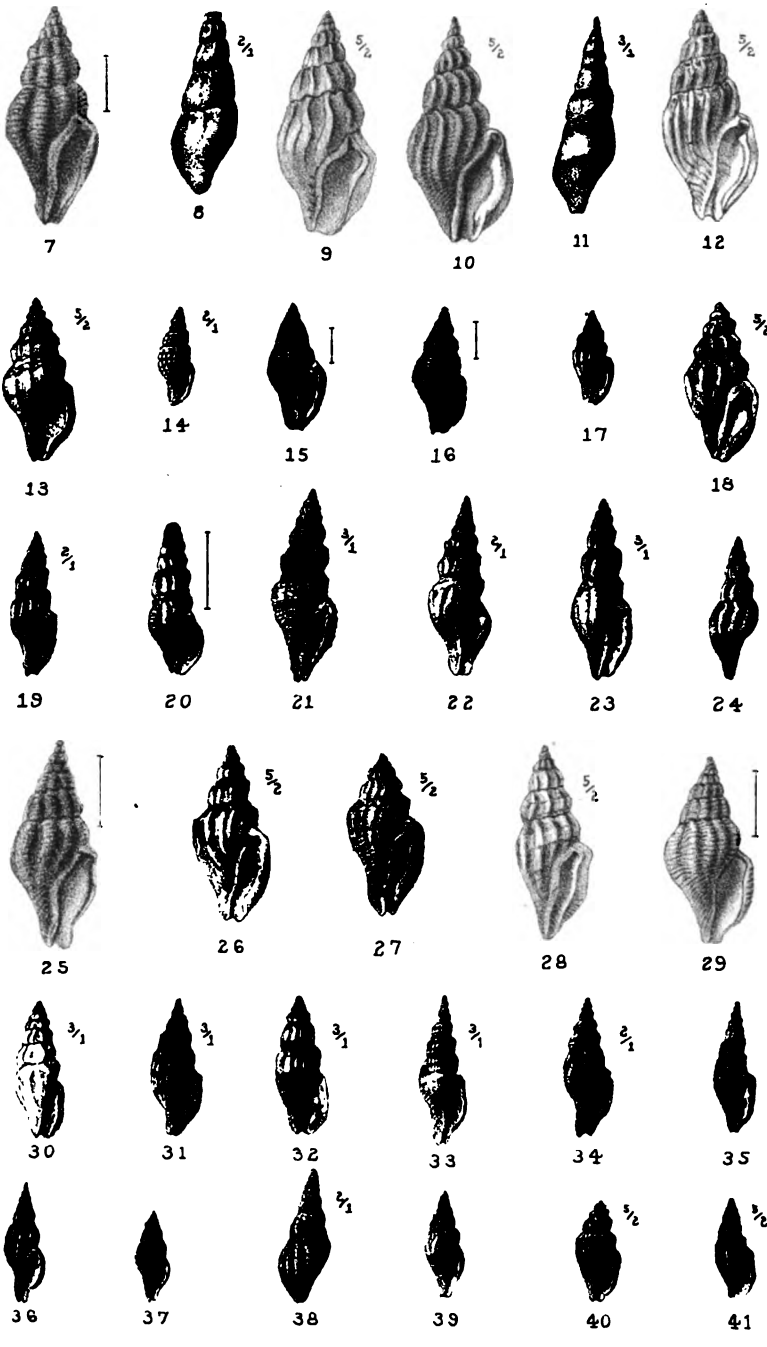
Digitized by Google

Digitized by Google



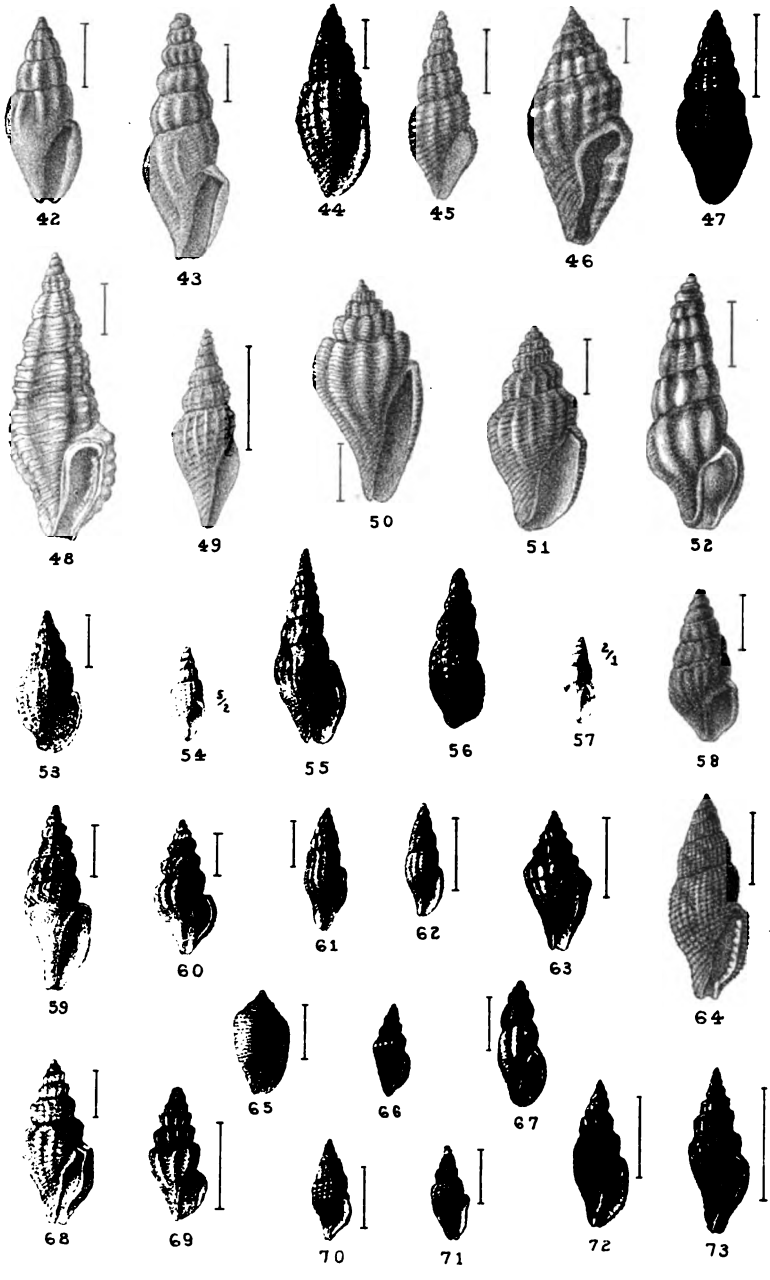
Digitized by Google

Digitized by Google



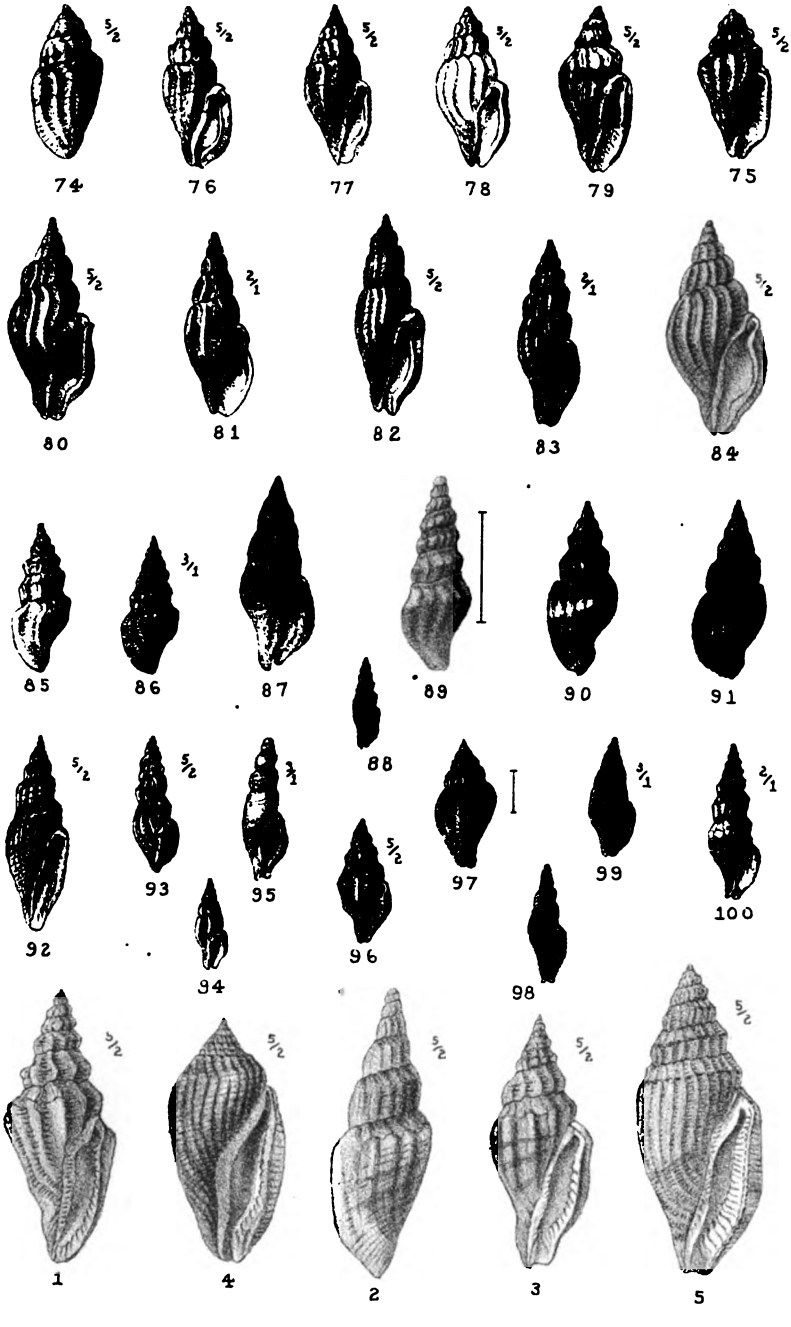
Digitized by Google

Digitized by Google



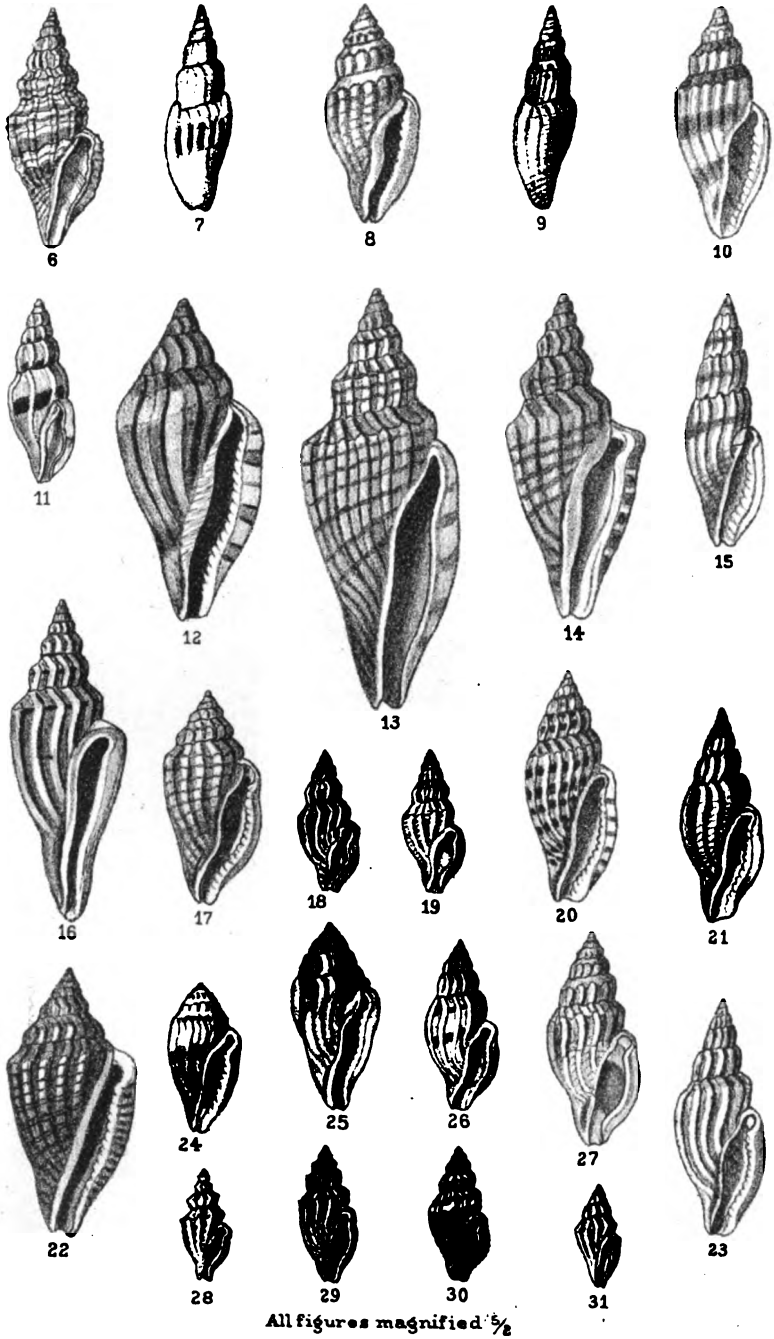
Digitized by Google

Digitized by Google



Digitized by Google

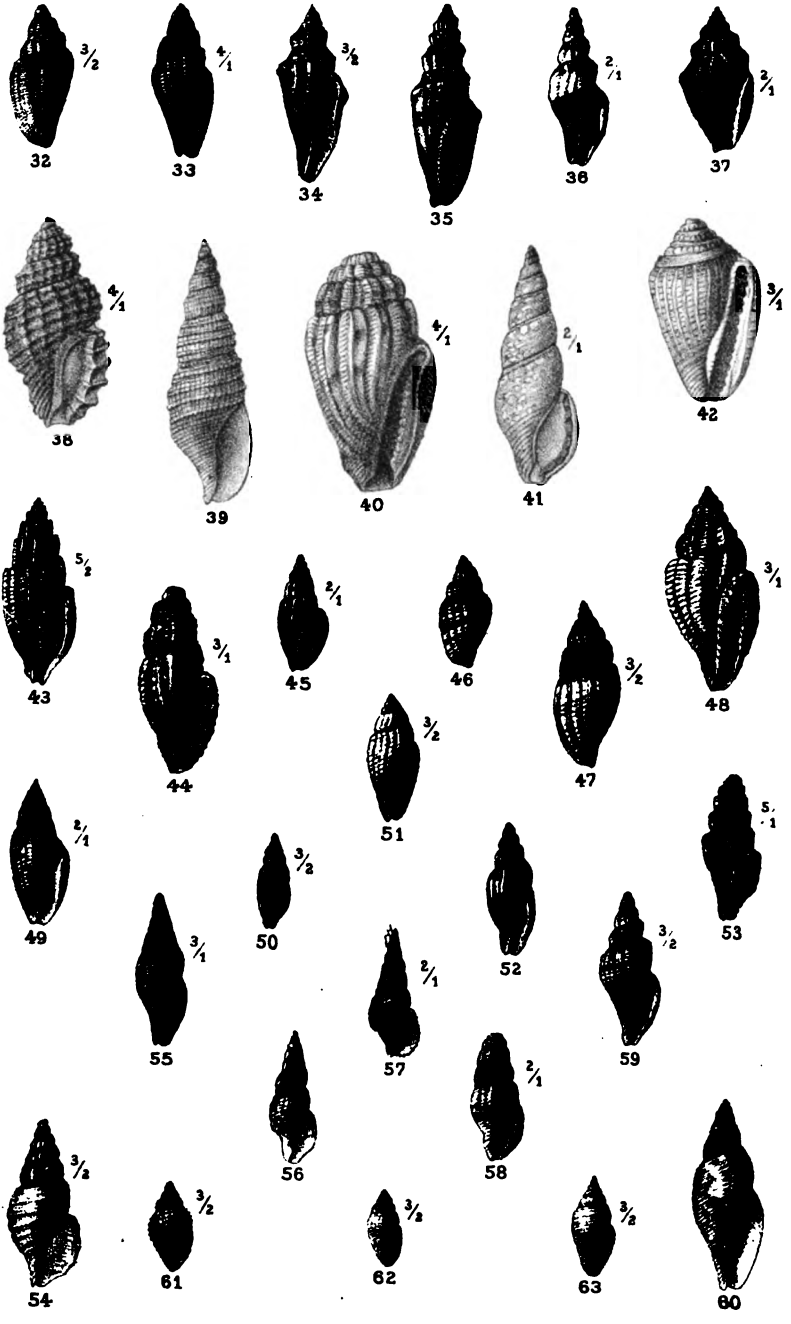
Digitized by Google



All figures magnified 5/2

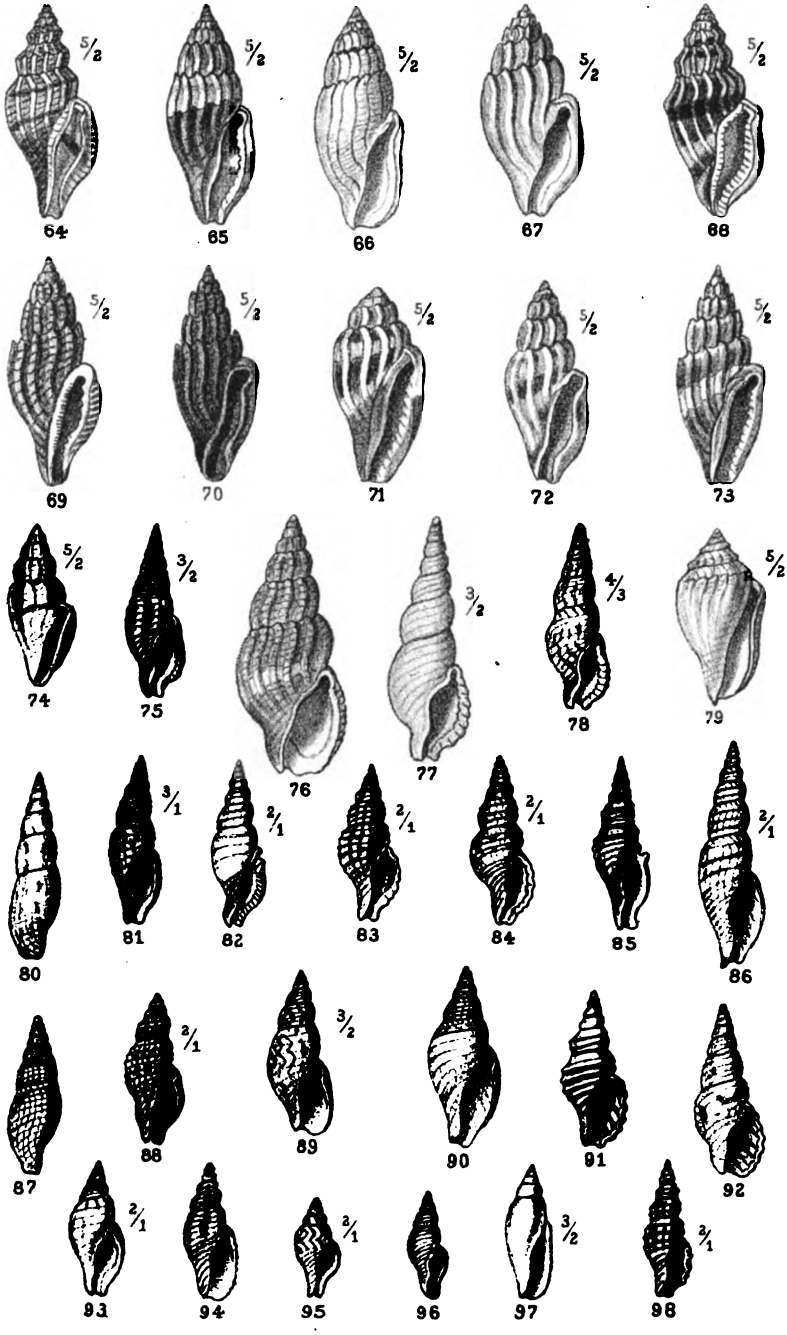
Digitized by Google

Digitized by Google



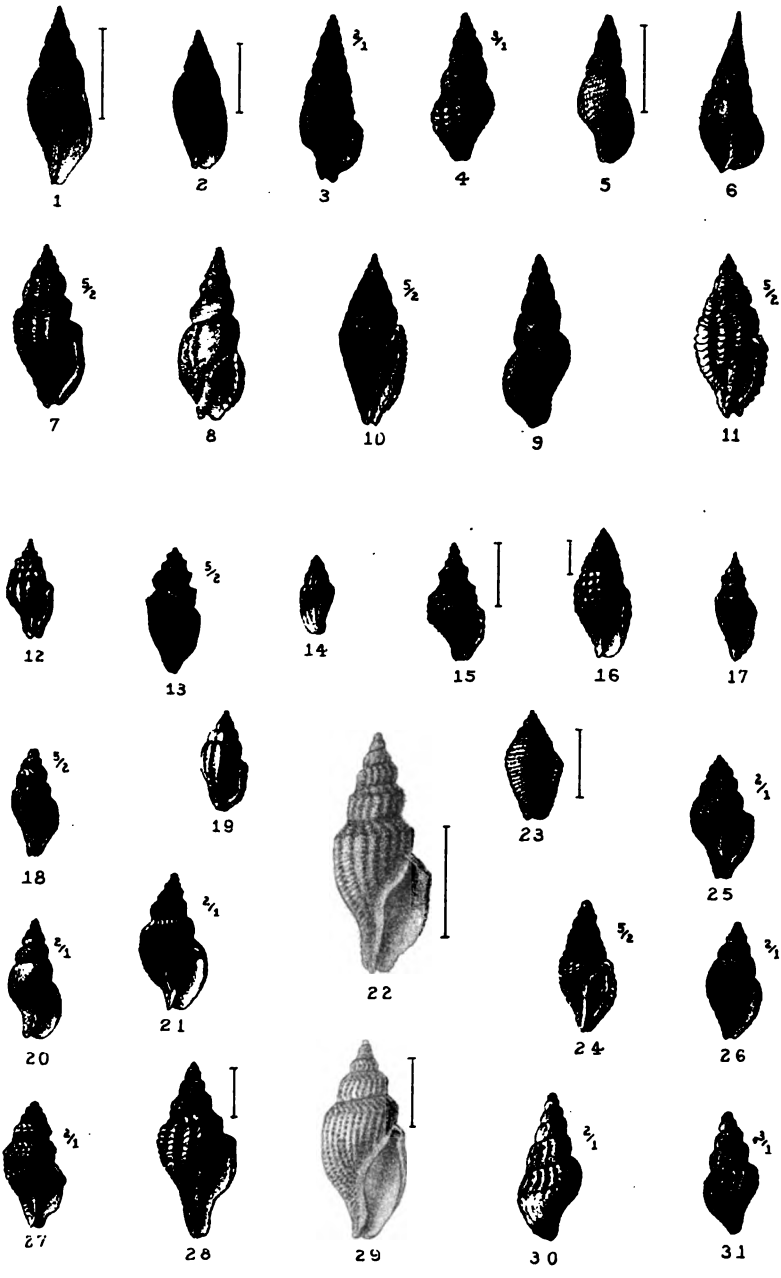
Digitized by Google

Digitized by Google



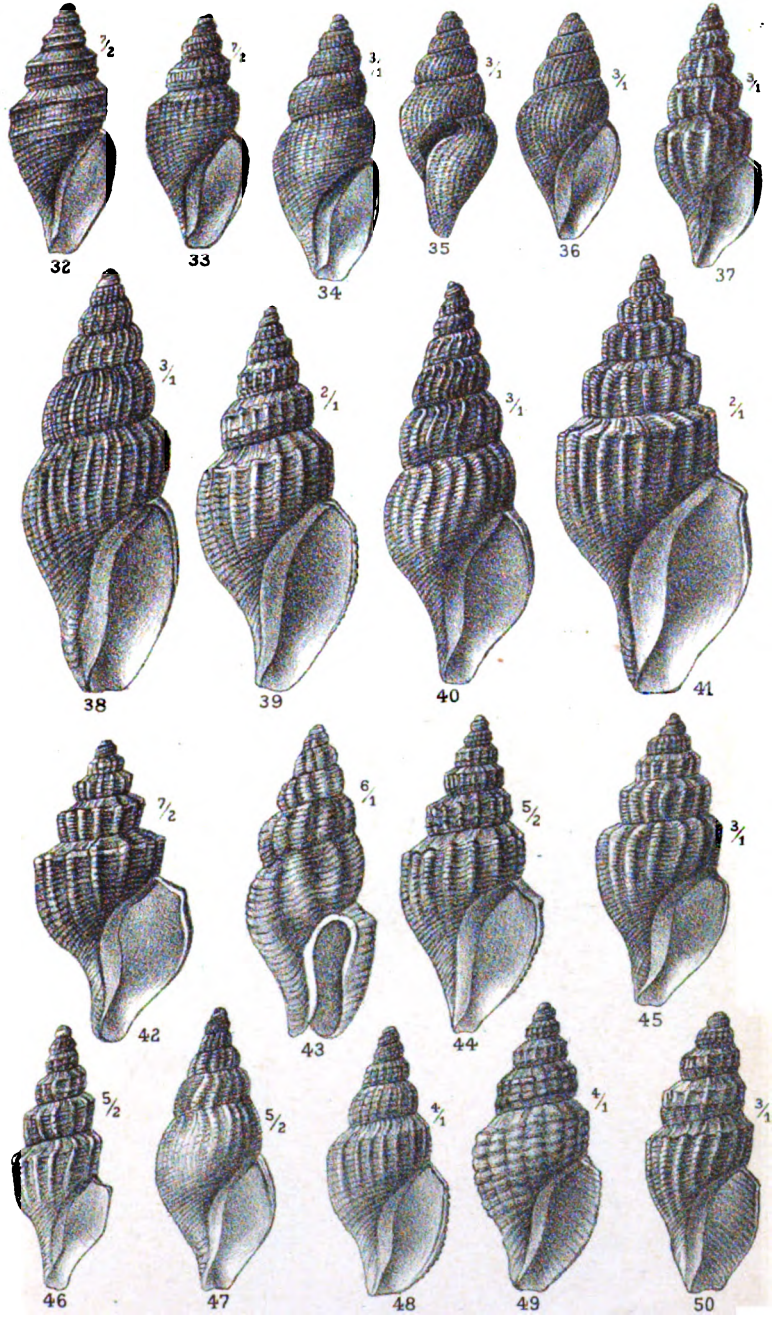
Digitized by Google

Digitized by Google



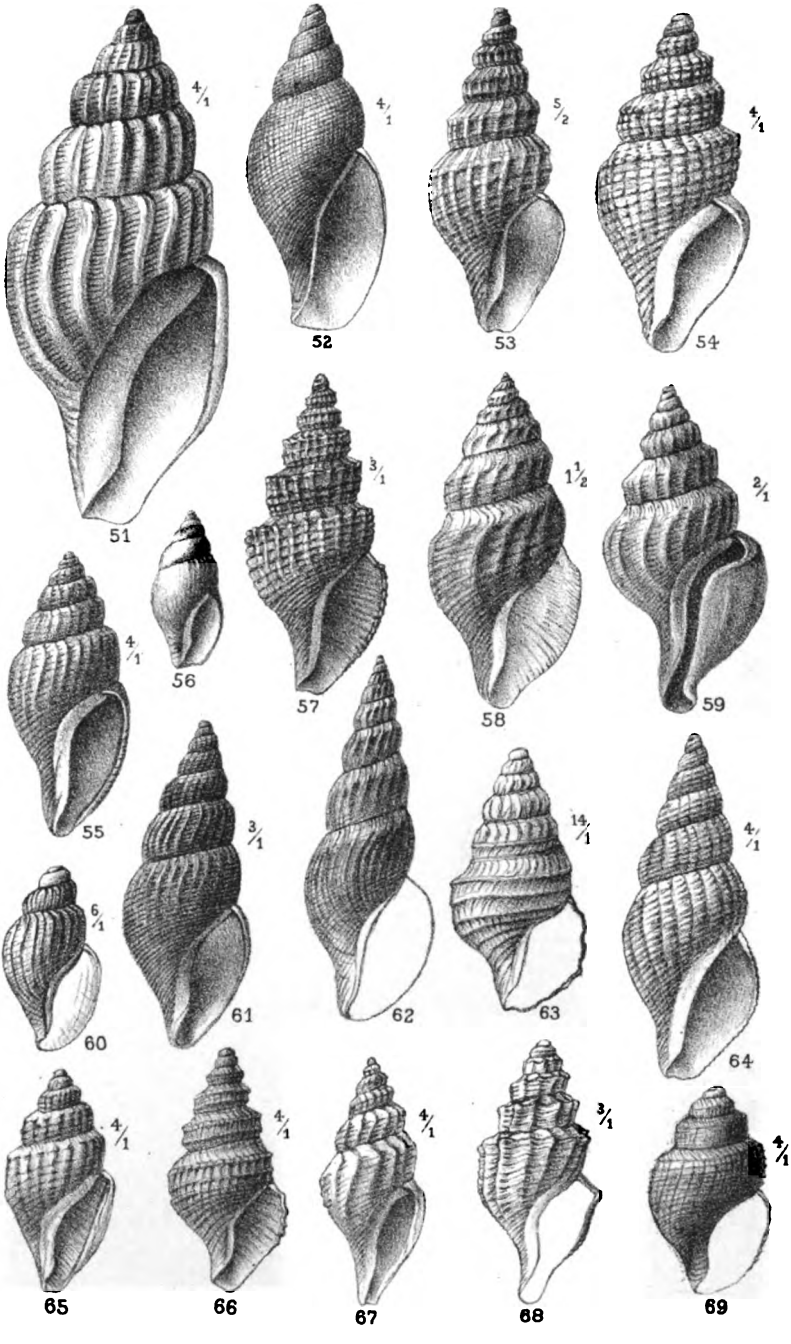
Digitized by Google

Digitized by Google



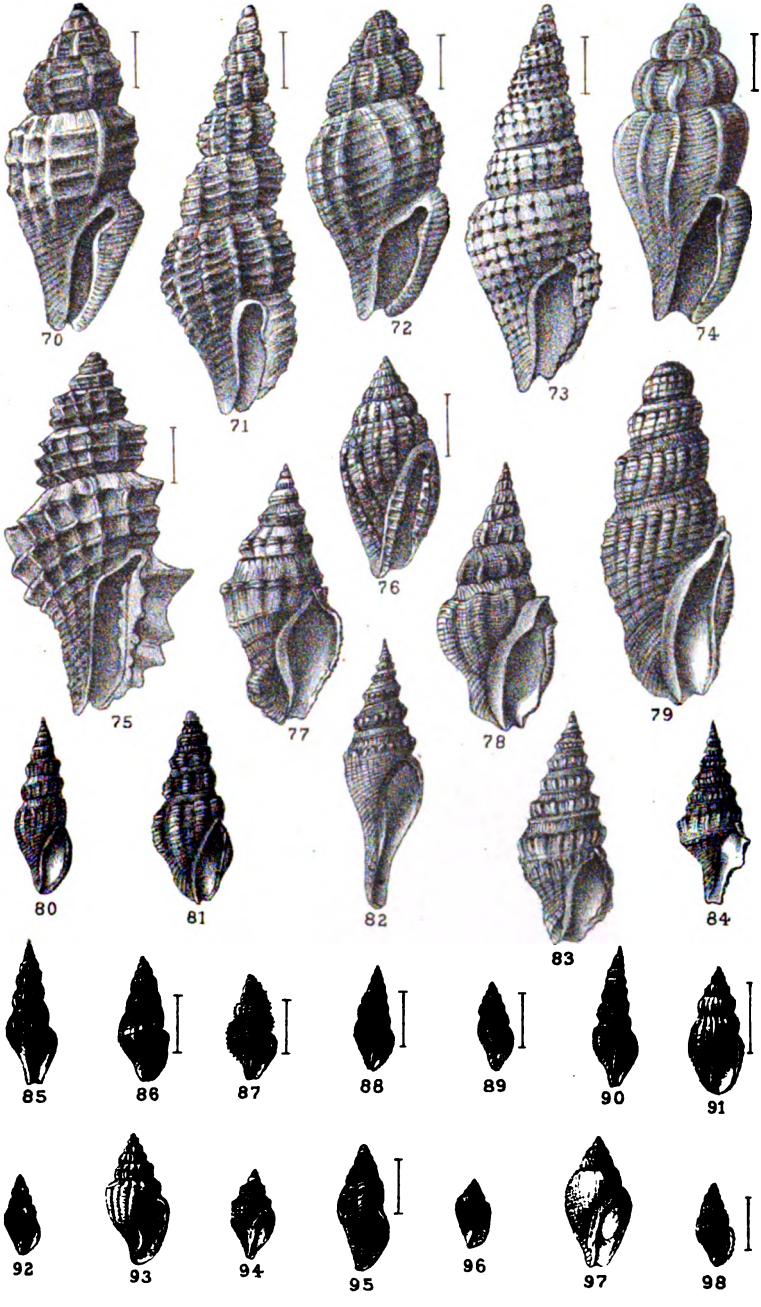
Digitized by Google

Digitized by Google



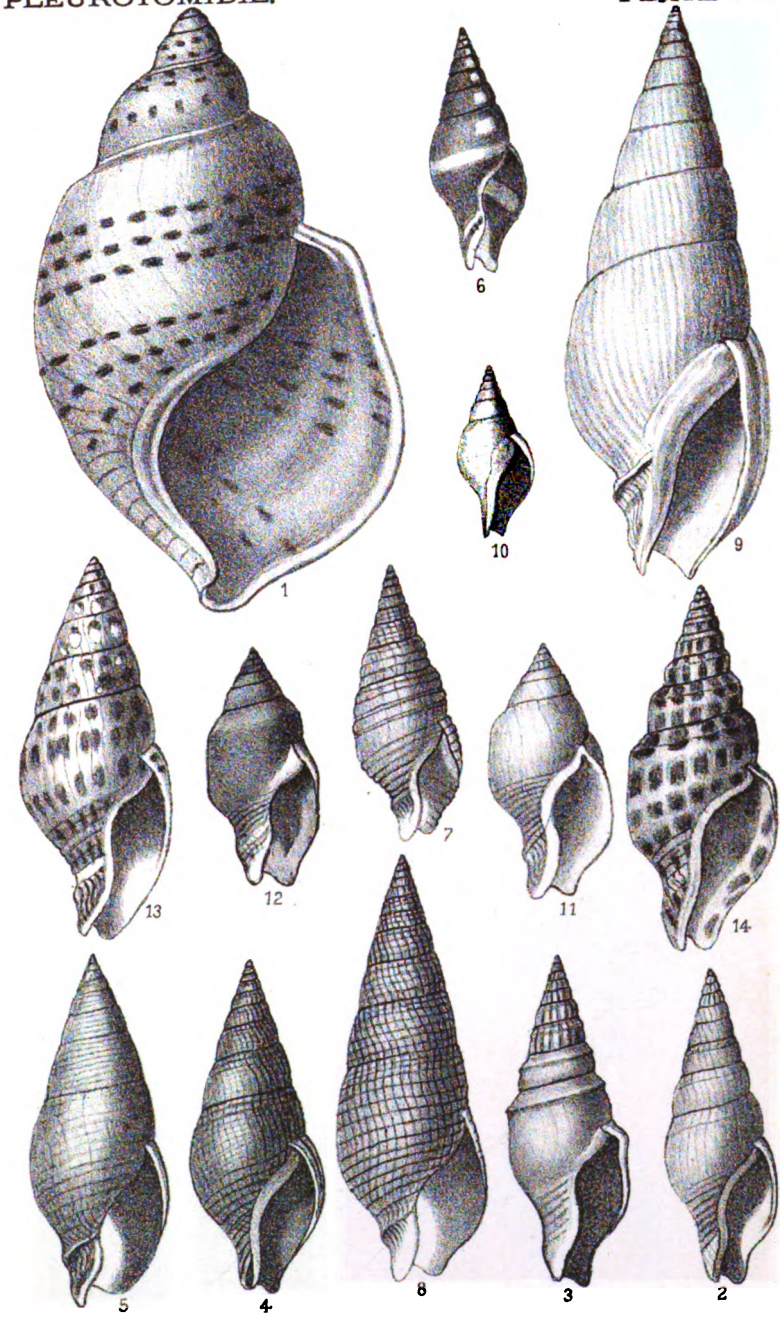
Digitized by Google

Digitized by Google



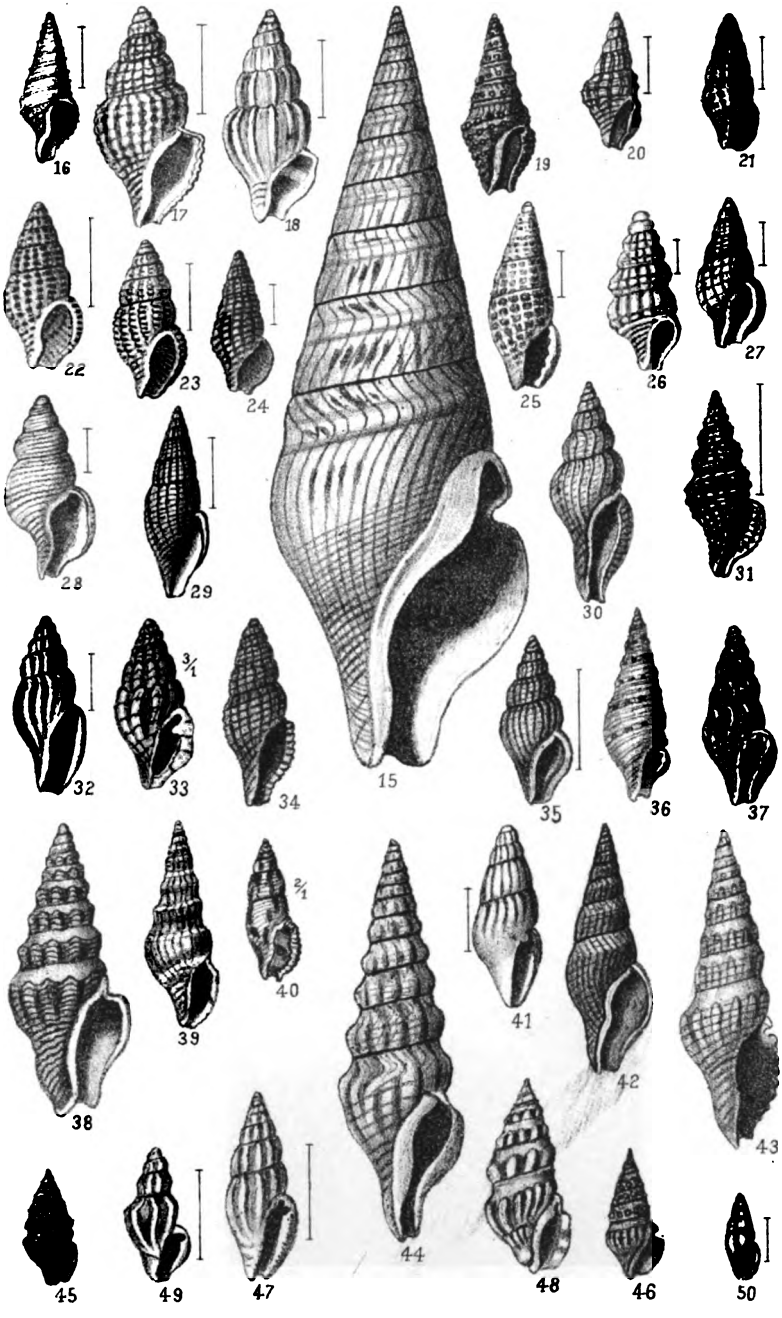
Digitized by Google

Digitized by Google



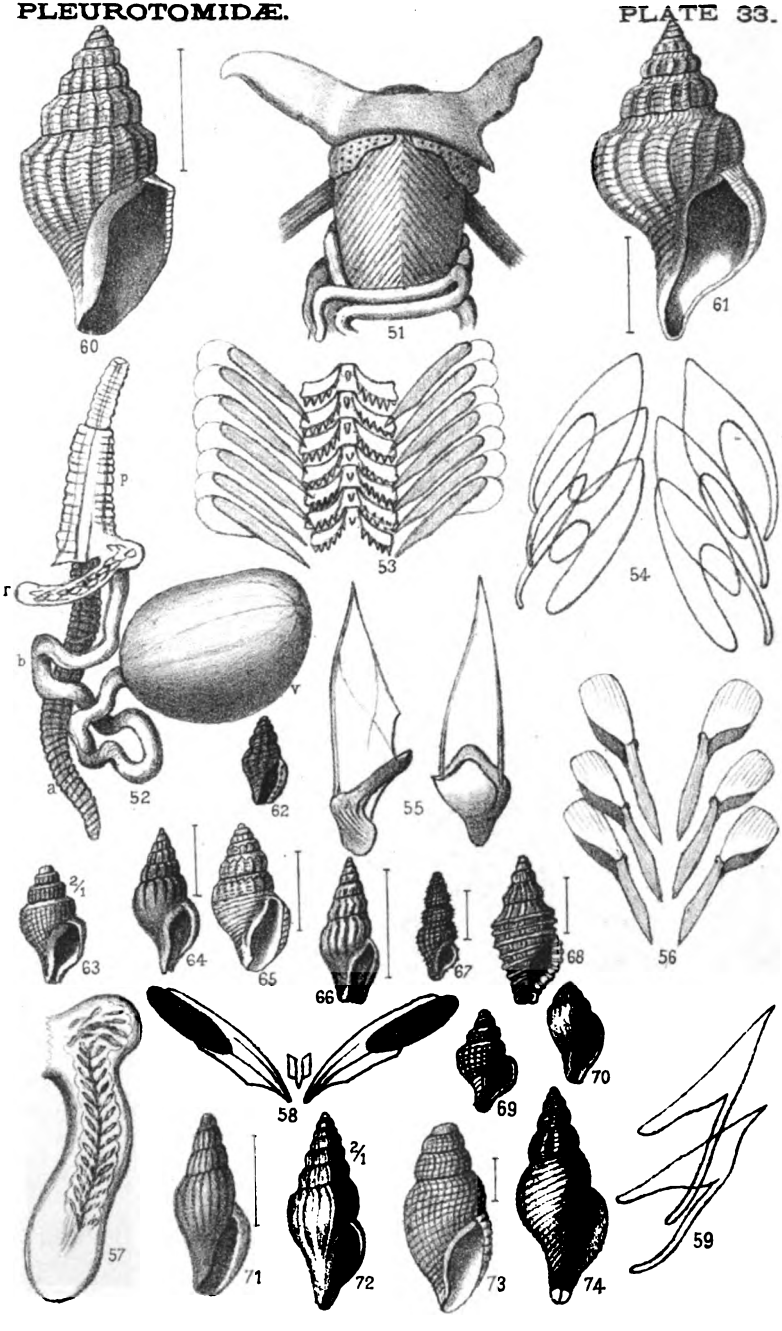
Digitized by Google

Digitized by Google



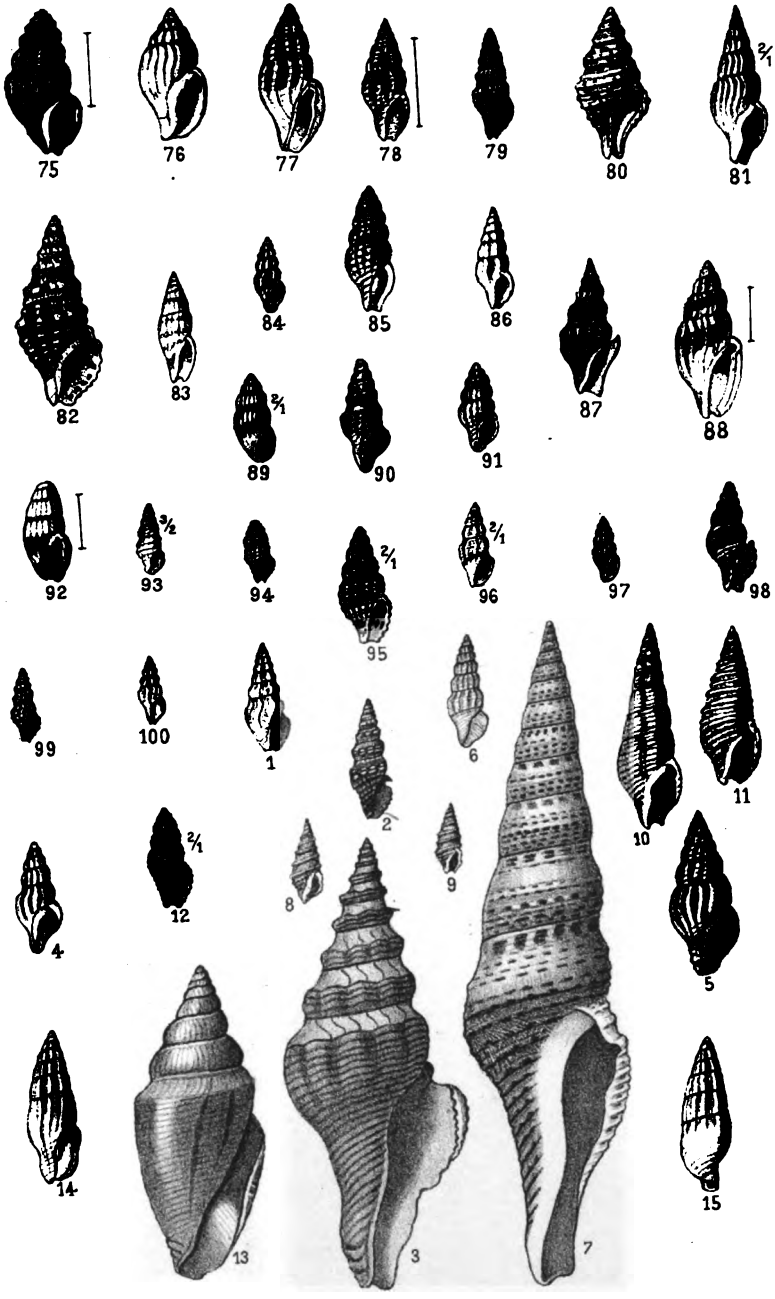
Digitized by Google

Digitized by Google



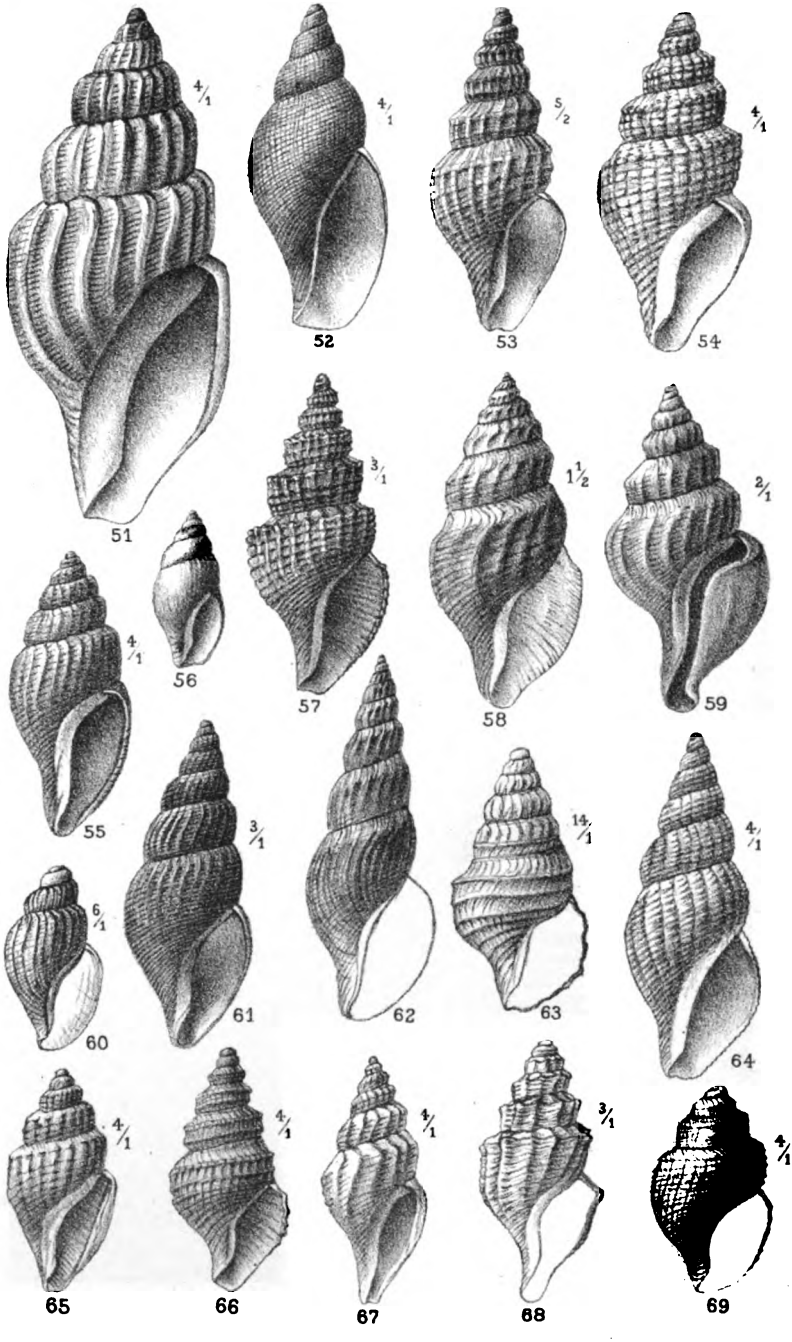
Digitized by Google

Digitized by Google



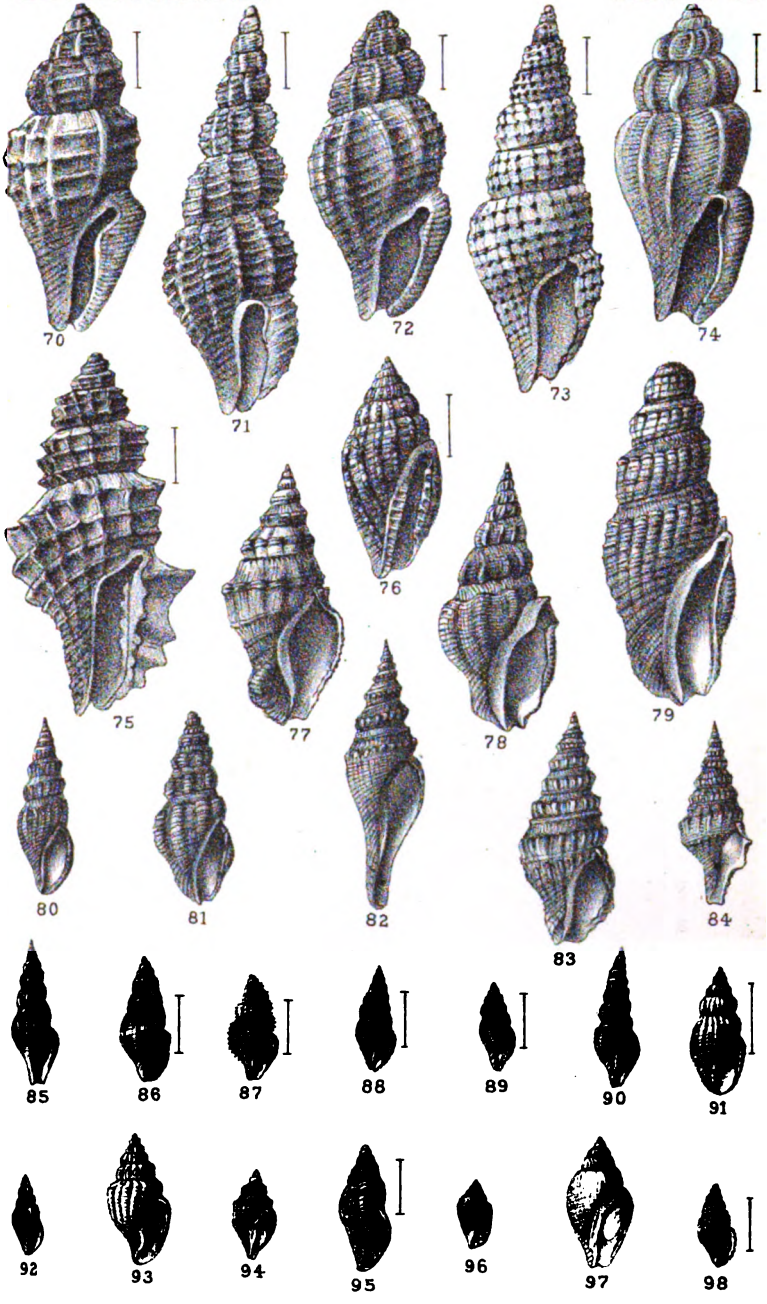
Digitized by Google

Digitized by Google



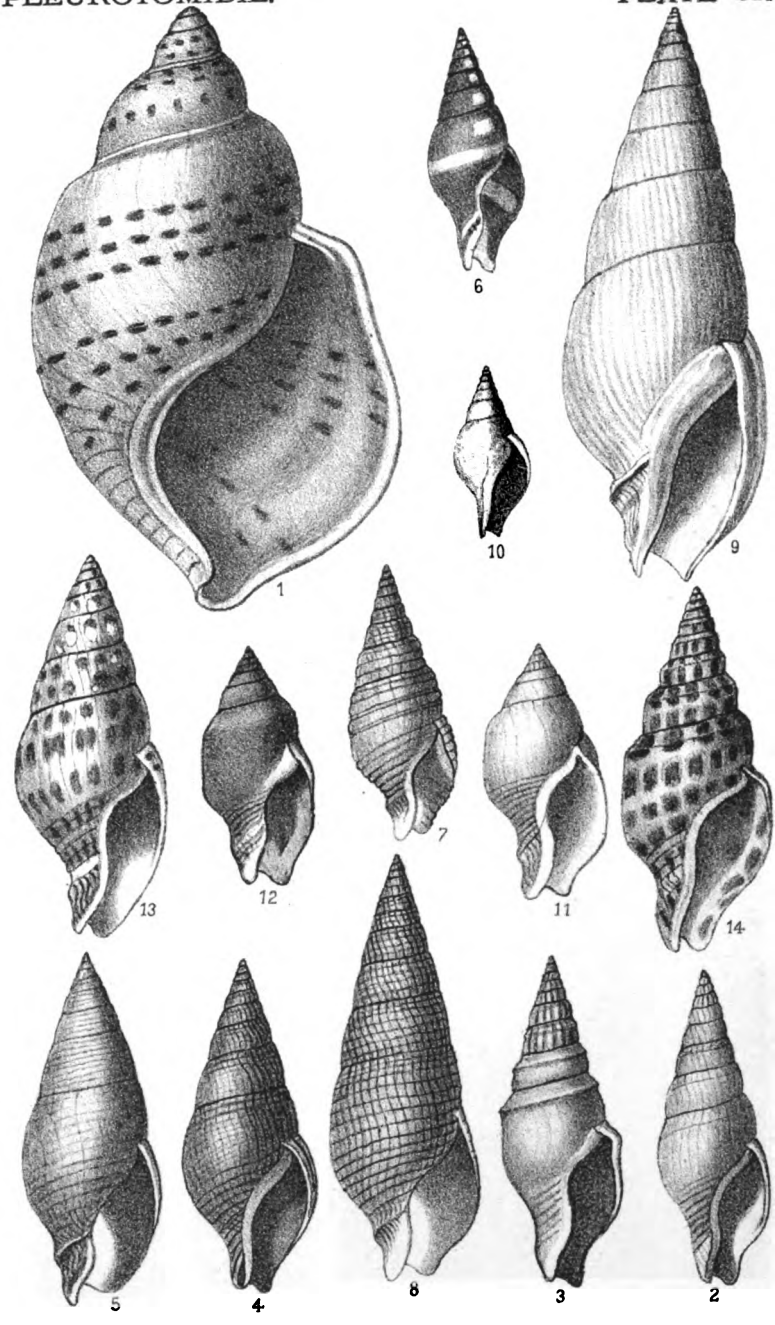
Digitized by Google

Digitized by Google



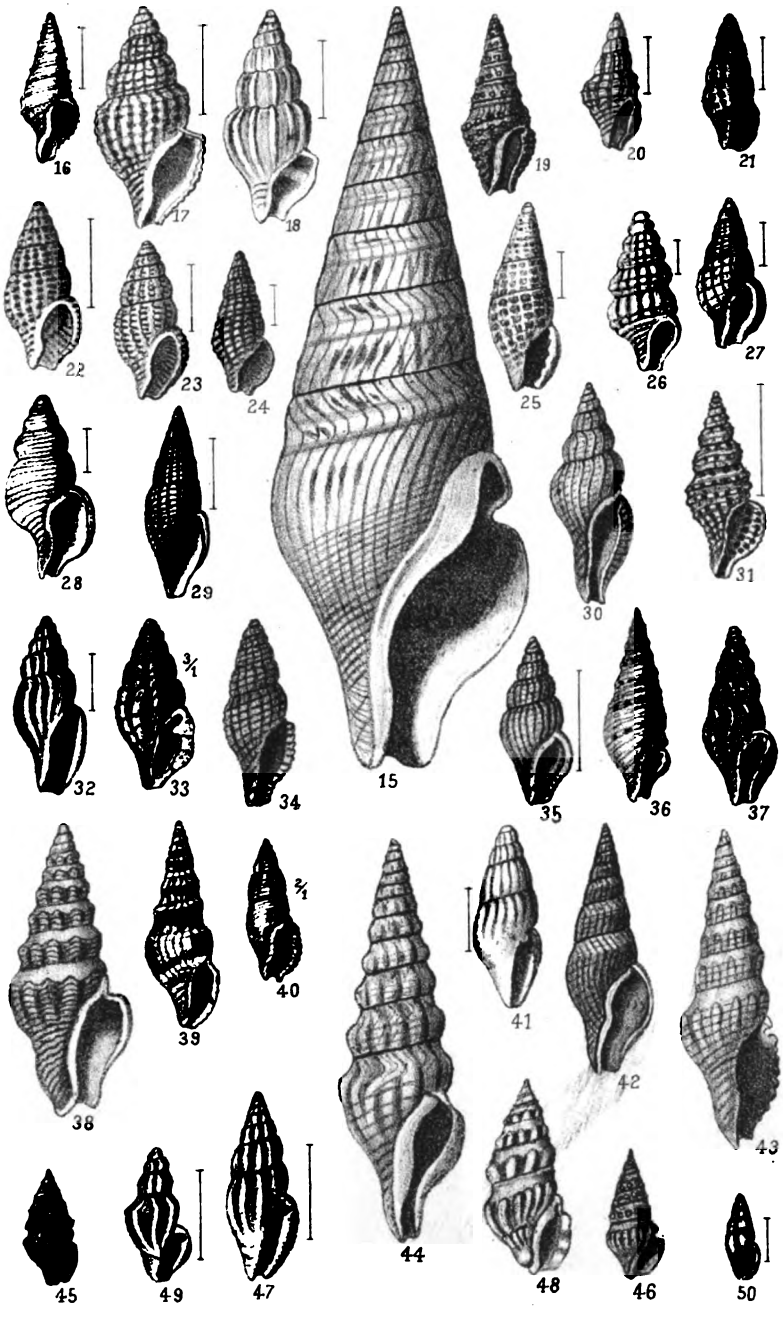
Digitized by Google

Digitized by Google



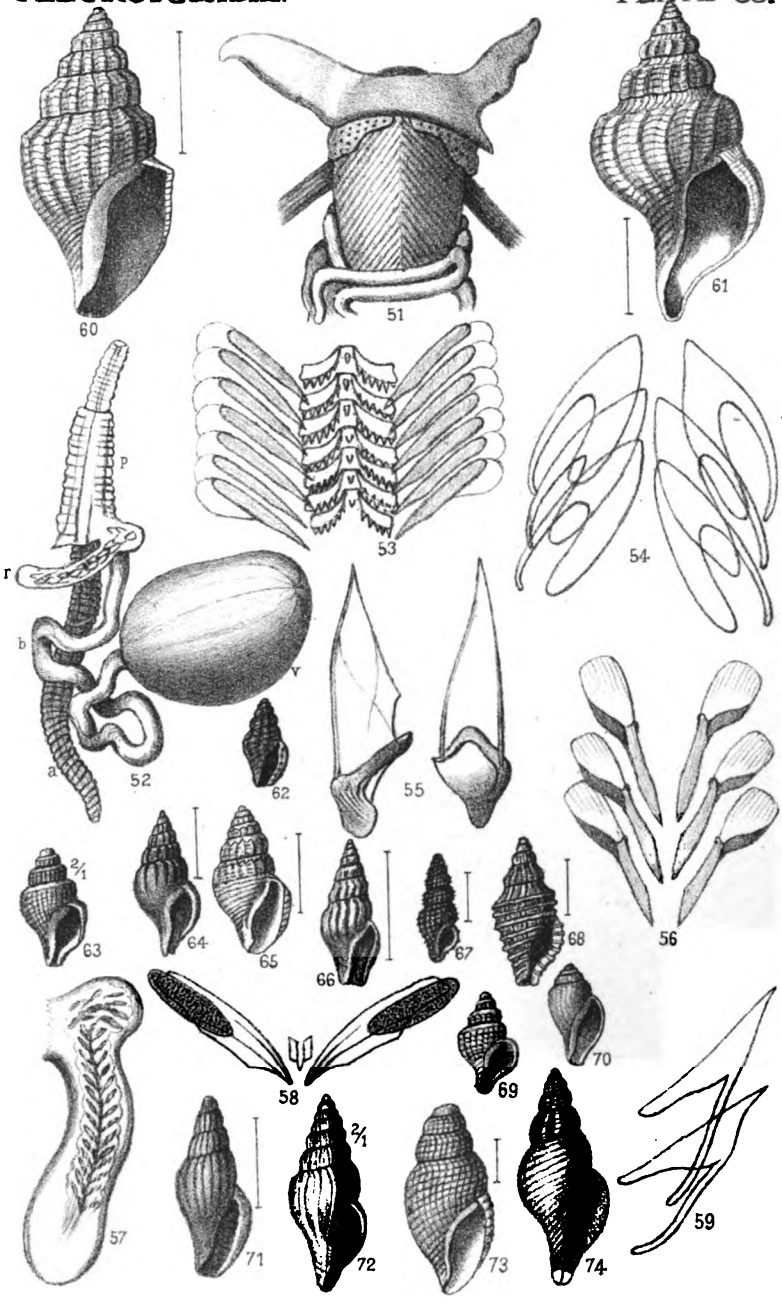
Digitized by Google

Digitized by Google



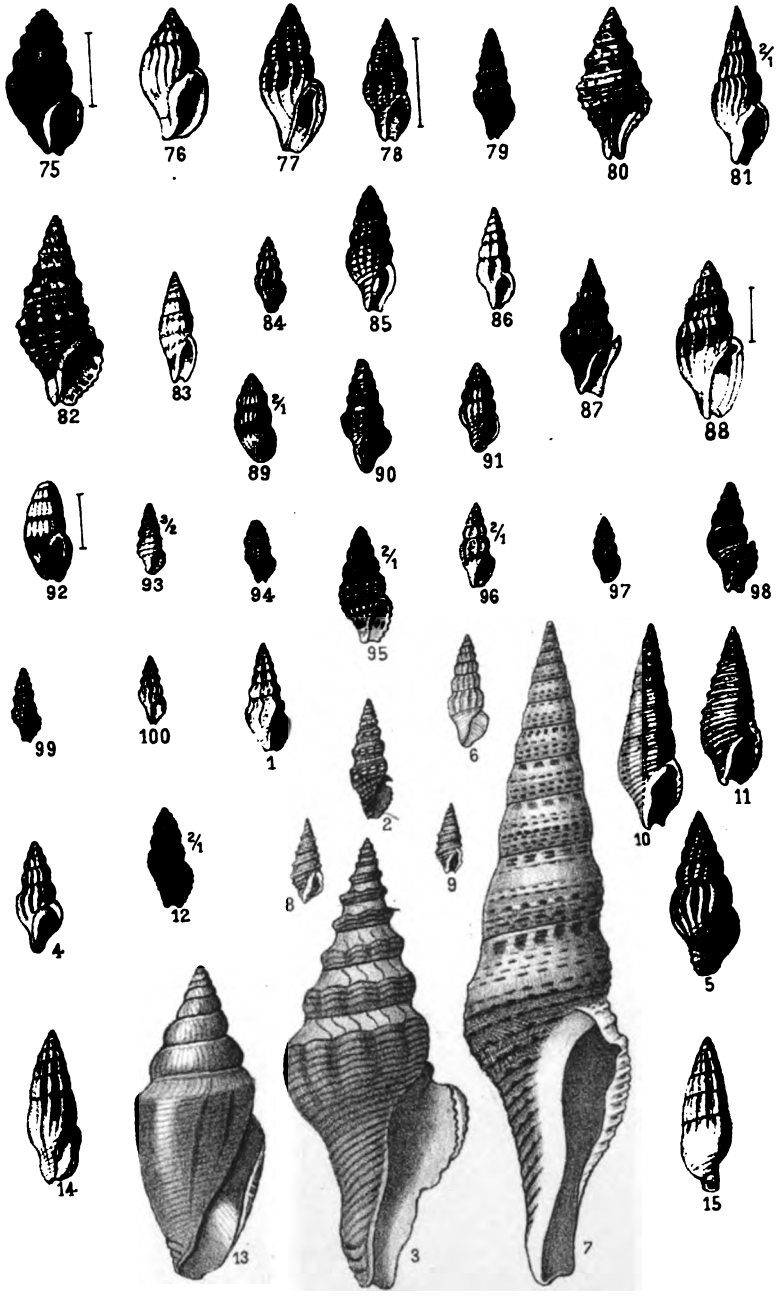
Digitized by Google

Digitized by Google



Digitized by Google

Digitized by Google



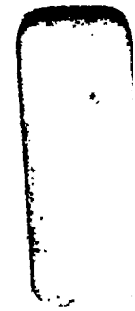
Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

3 2044 106 213 838



Digitized by Google

Digitized by Google